Sphene capital

09 July 2012

Catalis

Reuters: AECO.DE **Bloomberg:** XAE:GR

Rating: Buy	**Risk: High**
Price: EUR 0.09	
Price target: EUR 0.22	

Turnaround story unfolding … on the way to recovery

Technology leader in testing and development services
Catalis is a leading outsourcing service provider, serving the global media industry with its 324 employees. Through its two wholly owned subsidiaries, Testronic Laboratories and Kuju Entertainment, Catalis offers quality assurance and development services to film, video games, hardware and software companies. Its two pillars allow the company to exploit synergies and balance out opposing industry trends. Catalis thus enjoys a unique global position, especially with respect to the increasing convergence of the media, i.e. DVD/Blue-ray, video games and e-learning.

Broadly diversified customer base with top credit quality
Catalis' customer roster comprises the "who's who" of the global media industry, from Hollywood majors and selected niche studios to traditional home entertainment manufacturers to leading video games developers. Business relations have a long-term orientation, and we can see very few credit quality risks.

New management with high turnaround expertise
The new executive directors boast an excellent track record in the turnaround and repositioning of enterprises. Advanced Inflight Alliance, now a global market leader for on-board entertainment thanks to this team's restructuring efforts in the past ten years, is a company whose business model is strikingly similar to that of Catalis: Both enterprises are market leaders in digital media testing services and quality assurance, and both are successful video games developers. This is a favorable prerequisite for a successful turnaround.

Earnings situation likely to improve significantly
In the last fiscal year, the company posted an operating result of EUR -3.5mn on revenues of EUR 26.4mn. After deconsolidation of chronic loss-maker Doublesix Digital Publishing (DDP), the management's outlook for the current year anticipates a return to profitability. We are looking for an operating result of EUR 1.0mn on revenues of EUR 30.2mn (+14.4% YoY; EBIT margin 3.3%).

Initiation of coverage with Buy, PT EUR 0.22
Our 12 months price target of EUR 0.22 per share has been derived from a three-stage standardized DCF model. This results in an upside of about 144% compared to the most recent closing price of EUR 0.09 per share. Realization of the price target of EUR 0.22 would put the stock's valuation at 9.6x 2013e EV/EBIT (currently 5.2x) and 7.4x 2013e P/E (currently 2.4x). We are initiating our research coverage of Catalis stock with a Buy rating.

Risks
In our opinion, risks mainly emanate from (1) a breach of the financial covenants of its bank loans for a number of years so that its liabilities due to banks are now classified as "short-term", (2) the weak operating and financial performance of the three previous years, (3) high intensity of competition in the games development market.

WKN/ISIN: 927093/NL0000233625
Indices: -
Transparency level: General Standard
Weighted number of shares: 58.9mn
Market cap.: EUR 5.3mn
Daily trading volume (shares): 300,000
Publication H1/2012: End of August 2012

EUR mn (31/12)	2010	2011	2012e	2013e
Revenues	25.8	26.4	30.2	35.3
EBITDA	-0.3	-1.1	1.9	2.6
EBIT	-1.7	-3.5	1.0	2.0
EBT	-2.6	-3.8	0.6	1.8
EAT	-2.4	-7.4	0.6	1.7

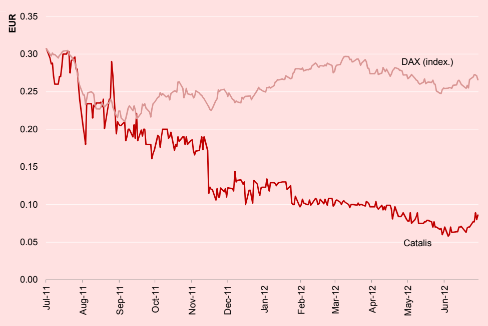
% of revenues	2010	2011	2012e	2013e
EBITDA	-1.3%	-4.1%	6.3%	7.4%
EBIT	-6.6%	-13.4%	3.3%	5.7%
EBT	-10.0%	-14.4%	1.9%	5.1%
EAT	-9.2%	-28.1%	1.9%	4.9%

EUR (per share)	2010	2011	2012e	2013e
EPS	-0.06	-0.17	0.01	0.03
Dividend	0.00	0.00	0.00	0.00
BVPS	0.41	0.25	0.19	0.22
CFPS	0.02	-0.05	0.02	0.05

%	2010	2011	2012e	2013e
Equity ratio	45.6%	29.3%	33.8%	39.3%
Gearing	0.8%	2.6%	2.4%	2.0%

x	2010	2011	2012e	2013e
P/E	n/a	n/a	9.4	3.0
EV/sales	0.65	0.72	0.45	0.33
EV/EBIT	n/a	n/a	13.9	5.7
P/BV	0.8	1.3	0.7	0.5

EUR mn	2012e	2013e
Guidance: Revenues	28.0-30.0	-
Guidance: EBIT	0.8-1.2	-



SOURCE: ONVISTA, SPHENE CAPITAL

Susanne Hasler, Equity Analyst
+ 49 (89) 744 35 58 / +49 (176) 24 60 52 66
susanne.hasler@sphene-capital.de
Peter Thilo Hasler, CEFA
+ 49 (89) 744 35 58 / +49 (176) 62 11 87 36
peter-thilo.hasler@sphene-capital.de

Content

Please note that every chapter starts with an extensive Executive Summary.

Executive Summary

Technology leader in quality assurance and video games development
Catalis comprises two core business segments: (1) Testronic is a leading global outsourcing service provider in quality assurance for the video games, home entertainment, software and hardware industries. Its range of services encompasses functionality, compatibility, security, localization and usability tests as well as equipment certification. These services are offered either at one of the company's five locations or on-site at the customers' premises. (2) With three studios in the UK and the Czech Republic, Kuju is one of Europe's leading independent games developers. Kuju does not develop and market games under its own name, but acts solely as an "extended workbench“ for large games developers (so-called "work-for-hire").

New executive board members with tried-and-proven turnaround expertise
The new executive management team – Otto Dauer and Peter Biewald, two former management board members of Advanced Inflight Alliance, and the new CEO Dominic Wheatley – boasts an excellent track record in the turnaround and repositioning of enterprises. We see strong similarities between the business models of Advanced Inflight Alliance and Catalis: Both companies are market leaders in digital media testing services and quality assurance, both are successful video games developers. A repeat performance of the success story of the new executive management team should thus be a distinct possibility. Following the deconsolidation of chronic loss-maker Doublesix Digital Publishing (DDP), the management's outlook for the current year provides for a return to profitability.

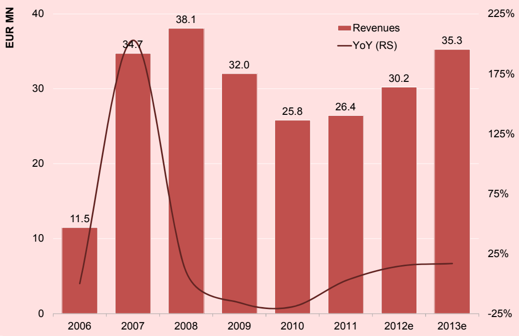
Favorable earnings trend expected after DDP deconsolidation
In the last three years, DDP accounted for the lion's share of Catalis' operating losses. Deconsolidation of the former and the resultant focus on Testronic and Kuju should lead to a significant improvement in the company's earnings. Our 2012 revenue and operating profit forecasts of EUR 30.2mn (+14.4% YoY) and EUR 1.0mn (EBIT margin 3.3%), respectively, are in line with the management's guidance. For 2013e, we are penciling in revenues of EUR 35.3mn (+16.7% YoY) and EBIT of EUR 2.0mn (corresponding to an EBIT margin on 5.7%). Earnings per share should triple from approximately EUR 0.01 in 2012e to approximately EUR 0.03 in 2013e.

Initiation of coverage with a Buy rating, price target EUR 0.22
Our valuation of Catalis stock is derived from a three-stage DCF model. DDP's deconsolidation should enable the company to generate above-average earnings growth rates in the coming years. We have assumed an EBIT CAGR of 8.8% during the rough-planning phase and an average FCF growth rate of 1.7% in the terminal value (TV). WACC is assumed to be 13.7% initially and 9.7% in the TV. Compared with the current stock price of the EUR 0.09, this translates into upside of slightly above 144%; realization of the price target of EUR 0.22 would put the stock's valuation at 9.6x 2013e EV/EBIT (currently 5.2x) and 7.4x 2013e P/E (currently 2.4x).

Weaknesses and risks
We see the following risks for the realization of our price target: (1) Between 2009 and 2011, Catalis incurred operating losses totaling EUR -6.7mn, and several capital measures were required to close this shortfall. The possibility of further corporate actions cannot be ruled out for the current year. (2) Catalis has already breached the financial covenants of its bank loans for a number of years and its liabilities due to banks are now classified as "short-term". We regard it as highly unlikely that Catalis would be able to satisfy a demand for immediate payment on the part of the bank. (3) Competition among third-party developers is fierce, and internal development departments operated by games developers themselves – which are Kuju's customers – pose a potential threat to Kuju, as they might hire away qualified development personnel.

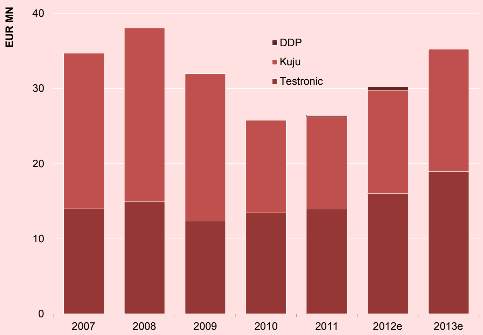
Business Profile

REVENUES AND REVENUE GROWTH



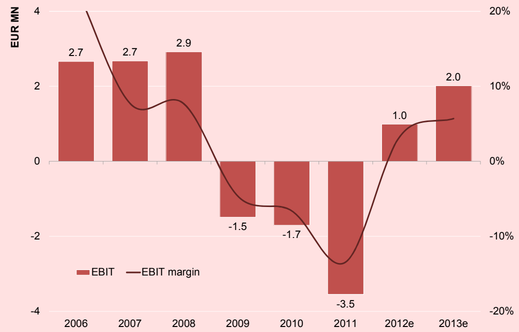
We expect average revenue growth of 15.5% per annum in the next two years.

REVENUES BY SEGMENT



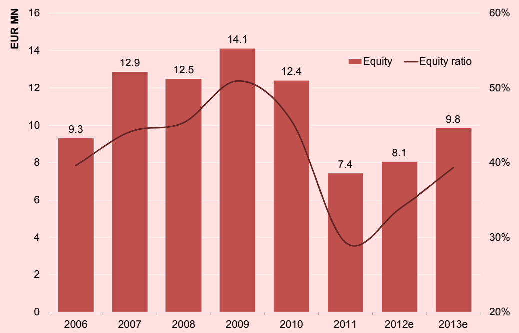
With a 2011-13e CAGR of 16.6%, Testronic should record slightly higher average growth rates than Kuju (15.2%).

EBIT AND EBIT MARGIN



After three loss-making years in succession, Catalis is set to return to profitability in the current year. We regard the company's EBIT guidance of EUR 0.8-1.2mn as achievable.

EQUITY AND EQUITY RATIO

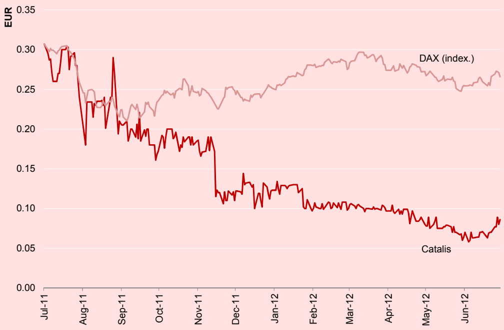


Despite a number of corporate actions, the company's equity ratio undershot the mark of 30% for the first time last year, coming in at 29.3%. We expect a rebound to 39.3% over the next two years.

SOURCE: COMPANY DATA, SPHENE CAPITAL

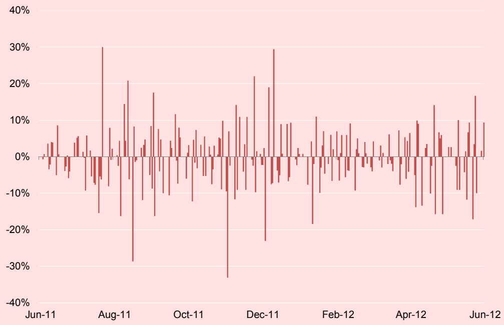
Stock Performance and Volatility

CATALIS VS. DAX



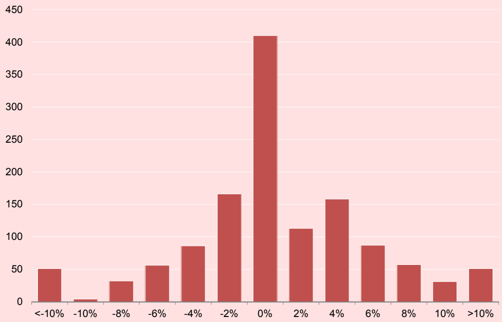
Over the last two years, the stock price has moved only in one direction: down. Now it seems possible that the decline will flatten out in the second half of the year. In addition, the newsflow has substantially improved.

VOLATILITY



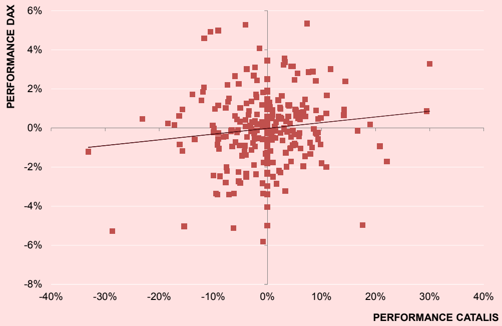
The chart illustrates the stock's relatively high volatility, with intraday fluctuations up to the mid double-digit percentage range. It should be noted that the stock's trading volumes are relatively low and fall short of the volumes to be expected for free-float market capitalization of this size.

DISTRIBUTION OF DAILY YIELDS, LTM



The chart shows the relatively broad dispersion of daily fluctuations around the zero line. Even levels of below -10% and in excess of +10% have been witnessed.

ESTIMATED BETA OF DAILY YIELDS, LTM

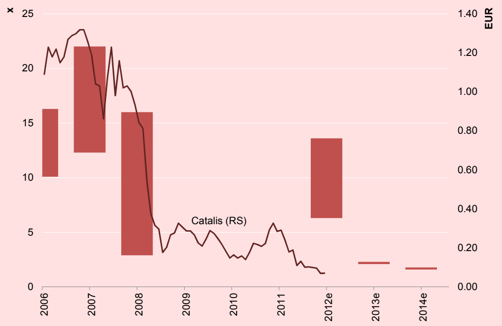


The Catalis stock shows a slightly positive correlation with the DAX.

SOURCE: ONVISTA, SPHENE CAPITAL

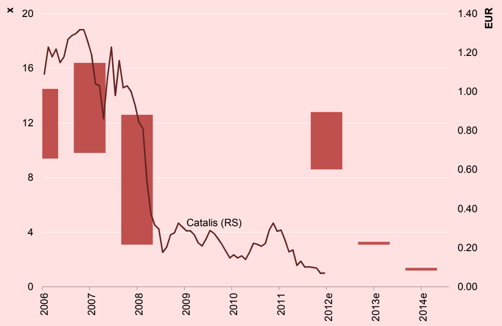
Valuation

TRAILING P/E



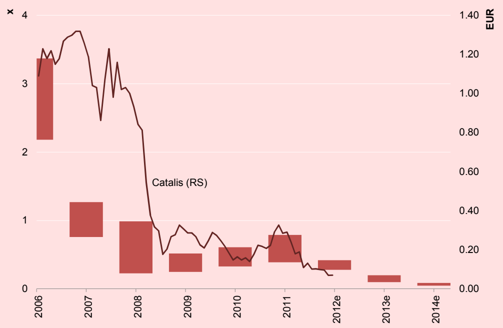
On the basis of the most recent closing price and our 2012e and 2013e estimates, the stock is trading at P/E ratios of 9.4x and 3.0x, respectively.

TRAILING EV/EBIT



According to our estimates, EV/EBIT should decline from 13.9x in 2012e to 5.7x in 2013e.

TRAILING EV/SALES



We are looking for the EV/Sales multiple to recede from currently 0.45x in 2012e to 0.33x in 2013e.

EV/SALES AND EBIT MARGIN

We expect a significant increase in the company's margins in the coming two years, which has not yet been reflected in multiple expansion.

SOURCE: COMPANY DATA, SPHENE CAPITAL

Valuation

For lack of meaningful peers, we have valued the Catalis stock solely on the basis of a standardized three-stage DCF model. After deconsolidation of the loss-making DDP entity, we expect Catalis to generate attractive and steadily increasing free cash flows in the coming three years of the detailed-planning phase: Our projections point to an average of EUR 1.6mn per annum in the 2012e-14e period. For the rough-planning phase ending in 2022e, we have assumed CAGR of 4.7% for the free cash flow. Our computation of the terminal value is based on an assumed average FCF growth rate of 1.7%, which corresponds to the current risk-free interest rate in the form of long-term German Bunds. For our bear-case and bull-case scenario analysis, we have used alternative revenue scenarios.

In the base-case scenario, our DCF model results in a price target of EUR 0.22 per share.

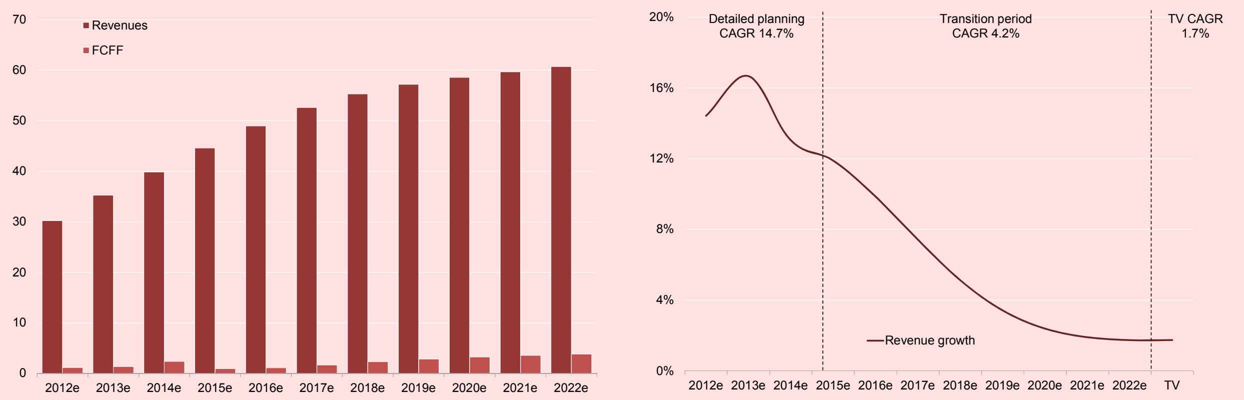
We have valued Catalis using a standardized three-stage DCF model
Roughly speaking, Catalis' business model can be called "asset-light" and personnel-intensive. Capital requirements for investments in tangible fixed assets and current working capital are negligible. Against this backdrop, we anticipate a high cash conversion rate. In conjunction with the turnaround situation faced by the company, a DCF model with a long-term orientation is the most suitable valuation approach for Catalis.

Following the separation of DDP, Catalis is now a pure-play outsourcing service provider. This organizational repositioning has optimized structures, gearing them to a clearly targeted organic growth thrust. We think that the new management team will be more successful than its predecessors in its efforts to boost staff capacity utilization in the quality assurance market, which is characterized by oligopolistic structures and extremely long-term customer relations. Similarly, a wide variety of unique selling propositions (USP) should enable Catalis to market new services, e.g. in the areas of e-books and video games, more skillfully than small niche players, with immediate effects on profitability.

Basic assumptions for the DCF model
In our standardized three-stage DCF model, we have used our detailed income-statement and balance-sheet projections for Catalis for the first phase through 2014e. Here, we expect revenues to grow by an annual average of 14.7%. This is followed by a second rough-planning phase ending in 2022e, for which we have assumed CAGR of 4.2%.

The model is based on our detailed income-statement and balance-sheet projections for the period through 2014e. This is followed by a second rough-planning phase ending in 2022e.

FIGURE 1: REVENUES AND FCFF (LHS), REVENUE GROWTH (RHS)



SOURCE: SPHENE CAPITAL

For the rough-planning phase, we have moreover assumed that key performance measures will approach levels sustainable in the long term.

Our DCF model is based on the following assumptions:

- Gradual increase in EBIT margins from 3.3% in 2012e to 9.8% in 2022e. For the terminal value, we have assumed an operating margin of 10.0%.

- The marginal tax rate will remain at a uniform level of 30.0% throughout the entire planning period.
- Average annual FCF growth rate of 1.7% in the terminal value, corresponding to the current risk-free interest rate of ten-year German Bunds.
- Fundamental beta of 3.0, derived from the following factors:

TABLE 1: DERIVATION OF FUNDAMENTAL BETA

Degree of diversification	0.20
Competitive intensity	0.30
Business model maturity	0.10
Regulatory risks	0.10
Financial risks	1.00
Earnings forecast risks	0.30
Market beta	1.00
Beta	**3.00**

SOURCE: SPHENE CAPITAL

- Stable capital turnover of 300% throughout the entire planning horizon.
- Costs of capital in the terminal value that do not differ from those of other mature companies; consequently, we have assumed that WACC will decline from currently 13.9% (rf 1.7%, implied ERP 4.6%, DRP 6.0%, target capital structure ~85%/15%) to 9.7%.

TABLE 2: WACC, 2012e

Cost of equity		
Risk-free interest rate of 10-year Bunds	%	1.7%
Beta		3.0
Implied risk premium	%	4.6%
Cost of equity	%	15.5%
Envisaged target capital structure based on market values	%	83.8%
Weighted cost of equity	**%**	**13.0%**
Cost of debt		
Risk-free interest rate of 10-year Bunds	%	1.7%
Debt risk premium	%	6.0%
Cost of interest-bearing debt	%	7.7%
Tax rate (normalized)	%	30.0%
Cost of debt after taxes	%	5.3%
Envisaged target capital structure based on market values	%	16.2%
Weighted cost of debt	**%**	**0.9%**
WACC based market values	**%**	**13.9%**

SOURCE: SPHENE CAPITAL

Our base-case scenario indicates a price target of EUR 0.22 per share over a twelve-month horizon
In these computations, 53% of total enterprise value is derived from the terminal value and 47% from cash flows generated in the rough-planning phase.

TABLE 3: SUMMARY OF THE DCF MODEL

PV (terminal value)	kEUR	12,401
PV (cash flow over 10 years)	kEUR	10,881
Total PV	**kEUR**	**23,282**
Financial debt	kEUR	-8,625
Overdraft facility	kEUR	-1,722
Cash	kEUR	800
Value of equity	**kEUR**	**13,153**
Number of shares	mn	58,872
Price target per share	**EUR**	**0.22**

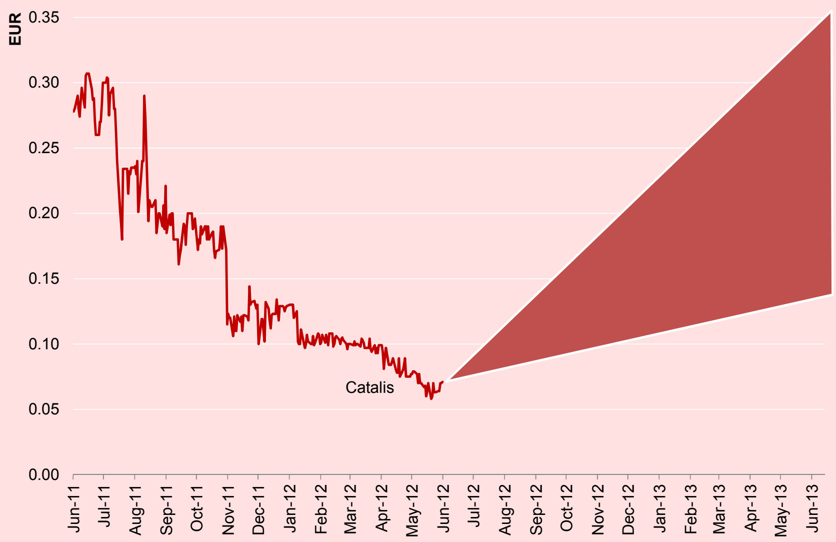
SOURCE: SPHENE CAPITAL

Scenario analysis

We have analyzed the following scenarios in a stress test:

- **Bear-case scenario:** In our bear-case scenario, we have revised the terminal-value EBIT margin downward by 300 basis points, from 10.0% to 7.0%, and reduced the average annual growth rate during the terminal value phase from 1.7% to 0.8%. We are therefore assuming that intensified testing activities in the e-book and games segments fail to have the envisaged success and exploitation of synergy effects does not lead to the anticipated margin enhancement. In this scenario, Catalis' enterprise value would decline to EUR 0.14 per share.
- **Bull-case scenario:** Our bull-case scenario would be realized in the event of even faster and more intensive entry into new businesses. Catalysts of such a development might be further successful sales efforts, e.g. in games testing. The agreement with a leading social games developer might be an initial indication that this scenario can be realized. In our bull-case scenario, we have assumed average annual growth of 2.6% in the terminal-value phase and an improvement in the operating margin to 13.0% by 2022e. In this case, we would increase our price target by EUR 0.13, to EUR 0.35 per share.

FIGURE 2: STOCK PERFORMANCE AND PRICE PROJECTION



We see a price target of EUR 0.22 per share over a twelve-month horizon. In our bear-case scenario, we have assumed setbacks in the entry into new business models (e-books or games testing), e.g. in a "double dip" environment. In our bull-case scenario, we assume that repositioning will be even more pronounced and faster.

SOURCE: ONVISTA, SPHENE CAPITAL

Stock performance catalysts

Catalysts for realization of the computed price target

In our view, the most important catalysts for Catalis' stock performance in the coming months are: (1) statements on business performance, initially upon publication of the six-month results; (2) acquisition of further orders in the areas of casual games testing and, in the medium term, (3) further profitability gains through exploitation of synergy effects, and (4) broad-based marketing of the eighth console generation.

Risks for our rating and price target

Risks

Risks for our rating and price target mainly result from (1) unexpected setbacks in the expansion of casual games testing, especially in an environment characterized by (2) adverse economic trends ("double dip"), and (3) greater-than-expected cost increases through new testing activities, unless they are offset by additional revenues.

TABLE 4: VALUATION MULTIPLES – CURRENT VS. PRICE TARGET

x	Valuation at current price of EUR 0.09			Valuation at EUR 0.22		
	2012e	2013e	2014e	2012e	2013e	2014e
EV/Sales	0.45x	0.33x	0.20x	0.71x	0.54x	0.40x
EV/EBIT	13.9x	5.7x	3.1x	21.6x	9.6x	6.0x
P/E	9.4x	3.0x	2.3x	22.9x	7.4x	5.7x

SOURCE: SPHENE CAPITAL

Testing and Development

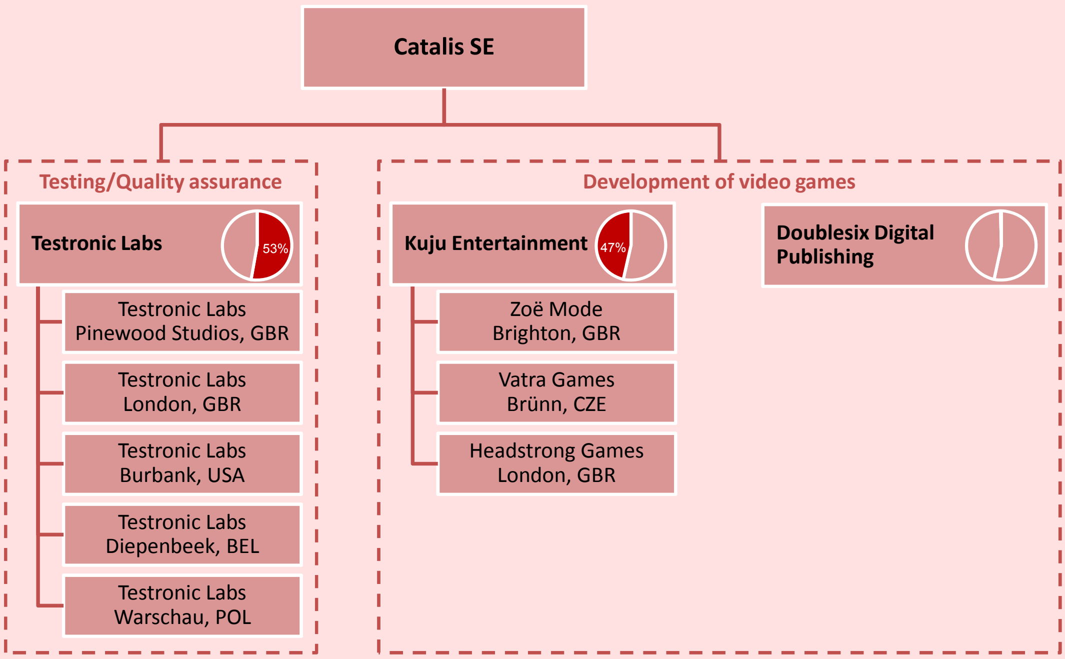
Catalis, which can trace its operating roots back to the early 1990s, is a leading outsourcing service provider, serving the global media industry with its 324 employees. Through its two wholly owned subsidiaries, Testronic Laboratories and Kuju Entertainment, Catalis offers quality assurance and development services to film, video games, hardware and software companies. The customer base includes the world's leading media companies, from Hollywood majors and independent film studios to hardware brand names to leading video games developers.

As a European stock corporation (SE), Catalis has implemented a single-tier board structure. The new executive directors, Dominic Wheatley, Otto Dauer and Peter Biewald, boast an excellent track record in the restructuring and repositioning of enterprises. In the last fiscal year, Catalis posted an operating result of EUR -3.5mn on revenues of EUR 26.4mn. After the deconsolidation of chronic loss-maker Doublesix Digital Publishing (DDP), the new management anticipates a return to profitability in the current fiscal year.

A holding company with two operating entities
Through its two wholly owned subsidiaries, Testronic Laboratories and Kuju Entertainment, Catalis is one of the leading global outsourcing service providers in the area of quality assurance and games development, serving the film, video games and software industries. Established in 2003, Catalis has 324 employees in five countries and specializes in testing and development services, which it offers to the world's leading media companies. These two business pillars allow the company to exploit synergies and balance out opposing industry trends. Catalis thus enjoys a unique global position, especially with respect to the increasing convergence of the media, i.e. DVD/Blue-ray, video games and e-learning.

Testronic operates four studios in the UK, the US, Belgium and Poland; Kuju is active at three locations in the UK and the Czech Republic. DDP will be retained as a legal entity, but its operating impact will be negligible. Catalis' registered office is in Eindhoven.

FIGURE 3: ORGANIZATIONAL STRUCTURE*



SOURCE: COMPANY DATA, SPHENE CAPITAL

* Data in the pie charts refer to the subsidiaries' shares in revenues in fiscal year 2011.

With 181 employees (as of y/e 2011), Testronic is a leading global provider of quality assurance outsourcing services for the video games, home entertainment, software and hardware industries. Its range of services encompasses functionality, compatibility, security, localization and usability tests as well as equipment certification. These services are offered either at one of the company's five locations or on-site at the customers' premises. Testronic's customer roster features the "who's who" of the global media industry, including all major Hollywood studios, leading games developers such as EA and Activision, and the world's largest publishing house, Pearson.

Quality assurance for media content

Quality control and testing are two sides of the same coin. While quality control is the process of analyzing a medium (CD, DVD, CD-ROM, etc.) in its entire breadth, testing subsumes all procedures used to identify and eliminate bugs in the product.

Established in 1998, Testronic – Catalis' original core business – offers its customers testing and quality assurance services for all types of media content, i.e. in particular

- for all types of content such as films, video games, music, websites, (interactive) software and e-learning products;
- for all communications levels, i.e. for physical media such as CD, DVD, Blu-ray discs and mobile platforms as well as the Internet; and
- for all media devices such as CD, DVD and Blu-ray players, TV sets, PCs, all games consoles (Nintendo DS, Nintendo Wii, Nintendo DSi, Microsoft Xbox 360, Sony PlayStation 2, Sony PlayStation 3, and Sony PSP), and the most commonly used mobile phones and smartphones.

Overview of services offered

A detailed look at Testronic's service portfolio reveals the following picture:

- Quality assurance in the areas of film and TV as well as home entertainment, in particular DVDs and Blu-ray discs;
- Games testing for consoles (Microsoft, Nintendo and Sony), PCs and handheld gaming devices and platforms;
- Website and software testing and consulting, in particular testing of interactive digital media such as websites, e-learning products or digital TV systems; and
- Hardware testing and certification, especially for digital TV and various other types of equipment and interfaces in the multimedia environment.

What does the company test? And how?

Testers put themselves in consumers' shoes and do everything to make the products they test crash or identify bugs

Depending on the medium, Catalis performs quality assurance on the basis of extensive checklists. In the video segment, typical checklist elements include not only the testing of menu navigation, language selection, subtitles and copy protection, but also, and in particular, compatibility analysis for media players from a wide variety of manufacturers. Testronic thus tests on more than 400 different DVD, HD-DVD and Blu-ray players, all leadings games consoles and numerous PC and Mac platforms.

By contrast, quality analysis for video games already starts during the development process, the goal being to accelerate the games' time to market. Since video games are a global business model, all games are tested in the most common language settings – 24 different ones at present. In addition, testers analyze whether games can really be played through to the end or crash under a permanent load. The PC games testing department comprises more than 150 different PCs, 250 graphics and 150 audio cards and a broad range of accessories. Games are played on all operating systems, starting with the installation process and moving on through start-up functionality and frame performance during the game to save functionalities.

In the area of hardware testing, Testronic offers a broad range of certification services, including alpha testing, beta testing, interoperability and interconnectivity testing, compatibility and functionality testing, and covers a wide range of communications and multimedia technologies such as DVB, ATSC, IEEE-1394. WiFi, USB, S-ATA, PCI Express, HDMI, DVI, Ethernet, and DLNA. Testronic’s leading role is, for instance, highlighted by the fact that it was the first company worldwide to certify USB compatibility of products.

In software testing, too, Testronic offers a wide range of services, including functionality and compatibility testing, language and localization testing, performance and strategy testing, security and usability testing, both on a standalone basis and in comparison with other software products. It goes without saying that these services cover the full range of available hardware, including mobile devices such as iPads, tablets or readers.

The customer base comprises the world's leading media companies
Testronic's customer base includes:

Testing of home entertainment products and games accounts for approximately 70% of Testronic's revenues.

- In DVD and Blu-ray disc testing: global content providers, i.e. notably the six major Hollywood studios Paramount, Warner Bros., Columbia, Walt Disney, Universal and 20th Century Fox, with whom Catalis has mostly concluded long-term delivery contracts. Alongside the "Big Six", Catalis collaborates at the project level with a considerable number of independent film studios, primarily from the US, the UK and France and including Deluxe and Technicolor in the US and HBO in the UK.
- In video games testing: The world's largest games developers, including Electronic Arts (EA), Eidos, Disney Interactive Studios, and Sony.
- In software and hardware testing: Above all, classic home entertainment manufacturers such as Bose, Philips, HP, Nokia, and Motorola.
- In digital TV/interactive: Cable network operators such as Kabel Deutschland or Unitymedia, TV broadcasters such as BBC, and the British e-book publisher Pearson.

Cycle time is the critical competitive factor
The average time required for media analysis and testing ranges between 24 and 48 hours and is thus much shorter than that of comparable service providers. In our view, media testing speed gives Testronic a decisive competitive edge, as smaller players, who lack comparable capacities, or Asian providers with lower productivity levels are progressively driven out of the market. What is more, requirements placed on games testers have skyrocketed in the last 30 years, notably in the field of video games: while the average video game in the late 1980s had a total of five linear levels playable in 30 minutes, even early 3D games from the mid-1990s, such as Donkey Kong Country, took days, while several months are required for today's cutting-edge games.

Short cycle times are a clear USP for Testronic.

Quality tends to be a hygiene factor
Apart from time, the quality of the work also plays a key role in project assignment. Testronic's customers have fully outsourced quality assurance responsibility to the company and cannot perform follow-up checks due to the high complexity of the testing and checking procedures required. If end customers find bugs after product delivery, this will, in all likelihood, affect decisions regarding the award of follow-up assignments.

Success fuels success and limits newcomers' opportunities for sustained positioning in the competitive environment.

Testronic is a technology leader in most areas
The relevant global market for electronic media testing and quality assurance has an aggregate volume of approximately USD 1+ bn A large share of this total is generated in the US and Europe, while Asia is the fastest growing region in the world by a wide margin.

Testronic is the global leader in DVD and Blu-ray disc testing and No. 3 in games testing.

Catalis is probably the global market leader in quality assurance for video films, notably in DVD and Blu-ray disc testing. On average, the company tests some hundred different DVDs/Blu-ray discs per annum. All in all, Testronic has tested more than 5,500 different 2D and 75 3D Blu-ray discs, clearly differentiating itself from the rest of the market. On a global scale, Catalis faces only a handful of competitors anyhow, all of which are much smaller. In Europe, Testronic is probably even the only relevant player in this field.

In the testing of interactive video games and in the niche of e-learning products, Testronic sees itself as the market leader in Europe. Compared with the oligopolistic structures in optical disc inspection, this market is relatively fragmented. Major video games testing competitors with revenues in excess of USD 5mn are the US-based companies VMC, Absolute Quality and iBeta Quality Assurance; in addition, Babel Media (GRB), Enzyme Labs (CDN) and RelQ from India play important roles. Apart from these players, a number of smaller competitors are also active in this market but tend to limit their activities to specific niches.

In the testing of standardized industry interfaces, Testronic is the only player to have obtained USB and SATA certifications for both Europe and the US.

Testronic has been a member of UltraViolet™ since early 2012
UltraViolet™ is an authentication and cloud-based licensing system for digital rights allowing users of digital home equipment to stream or download purchased content to various platforms and players. UltraViolet™ was developed by the 74 members of the cross-industry Digital Entertainment Content Ecosystem (DECE) consortium, which include film studios, consumer electronics manufacturers, cable companies and internet service providers. Testronic performs end-to-end quality assurance measures for UltraViolet™, e.g. in the areas of interoperability, compatibility, functionality, usability and certification.

Testronic's strategic role in the UltraViolet consortium bears testimony to its positioning as a technology leader

With a total of three operating studios in the UK and the Czech Republic, Kuju is one of Europe's leading independent games developers and has strong development capacities and experience in numerous genres on all relevant platforms. Kuju does not develop or market games under its own name, but acts exclusively as an "extended workbench" on behalf of large publishers. From a customer perspective, key factors speaking in favor of selecting Kuju are, above all, the studio's reliability and confidence in its performance due to past collaboration, its creativity and technical reputation, and, as the studio grows, budget compliance.

One of the leading outsourcing developers for video games
With over 15 years of experience gained in the development of more than 50 games, Kuju is one of the leading independent providers of outsourcing services for video games developers in the world and No. 1 in Europe. Relying on a "work-for-hire" business model, Kuju develops video games for all games consoles (PS2 and PS3. XBOX 360. Wii), PCs and mobile platforms (PSP, DSi/3DS) and for downloading. The company does not create the games on its own account, but limits itself to its role of "extended workbench" for large publishers.

Kuju develops video games for third parties.

Kuju follows a multi-studio approach, currently employing 115 games developers in three independent studios. In this context, each studio has its own clearly defined profile regarding game genres, target groups and technology:

- Headstrong Games, the original Kuju studio that was subsequently rebranded, develops licensed action and e-learning games for the Wii, Xbox360, PS3, DS and 3DS platforms. Examples of games developed by this studio are Battalion Wars I and II for Nintendo GameCube and Wii and the recently announced House of the Dead: Overkill for SEGA. The company's registered office is in London.
- Zoë Mode is an independent developer of low-end music, party, fitness and social games on all gaming platforms. The company's registered office is in Brighton.
- Vatra Games specializes in high-end next-generation action games for the Xbox360, PlayStation and PC platforms. The company's registered office is in Brno (CZE).

In addition to these studios, there is also Kuju America, the US studio entity, which is, however, currently not active in the operating business.

The current product pipeline includes video games such as South Park, Crush, Rail Simulator, Chime, Battalion Wars 2, and Art Academy.

High competitive intensity
Competition in the highly fragmented video games development market is relatively fierce and arises from two sources:

A large number of games developers are active in the market, but most of them work primarily at their own risk. Insolvencies are thus no rarity.

- Games developers' internal development departments: On the one hand, they account for more than 50% of the overall market; on the other, they are a potential threat to Kuju as they might hire away qualified development staff.
- Independent games developers, known as third-party developers, who develop games either independently or on behalf of games publishers. Competitors within this group can be subdivided further into multi-studio developers offering various genres and platforms, and specialists focusing on a single genre.

An active buy-and-build strategy
In the past, Catalis pursued an active buy-and-build strategy through Kuju. The approach aimed at combining organic growth with selective acquisitions in such

Kuju used to play an active role in the consolidation process.

a manner as to position Kuju as a fully integrated outsourcing service provider for the entire digital value chain of the media and entertainment industry. One key element of this strategy was to gradually drive forward diversification along key customers' value chains.

Customers are the A-list of the global video games industry
Kuju boasts longstanding customer relations with most international video games producers such as EA, Microsoft, Sony, Sega, Konami, and Nintendo.

Doublesix Digital Publishing (DDP) was established by Catalis with the aim of long-term exploitation of self-published content. The company thus moved away from its role of pure-play third-party developer and service provider and became a content owner itself. The downside of this strategy is its high capital tie-up, which the new management was no longer willing to shoulder. DDP's key assets were sold in early 2012, which means that only negligible revenues and a balanced result will, in all likelihood, be posted for this entity in the current year. However, DDP will continue to be listed in segment reporting in the future, too.

Video games at the company's own risk
Following the spin-off of Doublesix Digital Publishing (DDP) from Kuju Entertainment, Catalis became active in own-account video games production. The underlying strategy was to build up content for long-term exploitation rather than focusing solely on generating revenues from development services provided. This model clearly differentiates DDP from Kuju's work-for-hire studios.

Through DDP, Catalis also embarked on developing games at its own risk.

Downloads were offered on all relevant platforms: Xbox Live Arcade, PlayStation Network and PC distribution platforms such as Steam. In this environment, DDP has focused on the production and marketing of downloadable games and so far put three games on the market:

- “Burn Zombie Burn!”, a shooter game developed for the Apple Mac, was launched in June 2011, and
- the "Who Wants To Be A Millionaire?" quiz format for PlayStation 3, Xbox360 and iPhone, iPad and iPod Touch (including two special editions, "South Park – Who Wants To Be A Millionaire? Special Edition" and "Who Wants To Be A Movie Millionaire?") followed in December 2011.
- A third game is "All Zombies Must Die!“, the successor to “Burn Zombie Burn!”, a role playing game (RPG) designed for Xbox Live Arcade (XBLA).

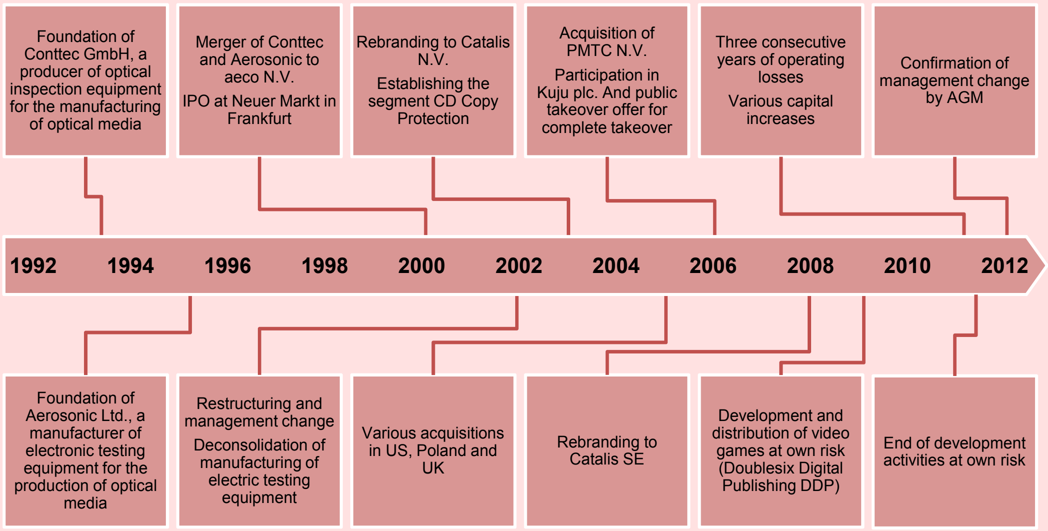
DDP no longer plays a role from an operating perspective
The original business plan provided for Catalis publishing an average of ten games per annum as of 2012, generating an operating result of approximately EUR 6.8mn. Despite an appealing product pipeline, DDP's revenues have so far fallen considerably short of the budgeted numbers, and losses have deviated substantially as well. No improvement seems to be in sight, as the market for self-published download games, especially for the XBLA, PC Steam and PSN platforms, although in an early stage of development, is becoming increasingly competitive, because leading games developers have also discovered this market for themselves. Against this backdrop, the new management has decided to refrain from actively pursuing the business segment of self-published video games. To also avoid further short-term burdens, games that were already halfway through the development process have been sold in the interim. In the first quarter 2012, for instance, the Strike Zone Zero SSZ game, including its 20 developers, was disposed of in an MBO.

Catalis' roots can be traced back to the early 1990s, when its two predecessor companies were established. This is already an indication of the fact that Catalis has pursued a buy-and-build strategy from the outset. Having started out as a hardware manufacturer for testing systems, Catalis has meanwhile evolved into a pure-play third-party service provider.

Catalis can look back on an eventful past
The company's roots go back to the early 1990s, when its two predecessor companies, Conttec GmbH and the UK-based Aerosonic Ltd., were established. After their merger under the name of aeco N. V. and the IPO in the Neuer Markt segment of the Frankfurt Stock Exchange in 2000 and following a period of

persistent operating losses, production of electronic test equipment was discontinued in 2003. The company was renamed and shifted the focus of its business activities to inspection equipment for optical media production. In the period from 2005 to 2007, business activities were expanded via various acquisitions.

FIGURE 4: CORPORATE HISTORY AT A GLANCE



SOURCE: COMPANY DATA, SPHENE CAPITAL

A total of 58.9mn shares have been issued. The nominal value per share is EUR 0.10. Institutional investors and management with a long-term orientation hold 18.1% of the shares, and free float accounts for 81.9%. The single largest investor is Navigator Equity Solutions SE with approximately 5.3mn shares.

Three capital increases in 2011
In the last twelve months, Catalis conducted three capital increases:

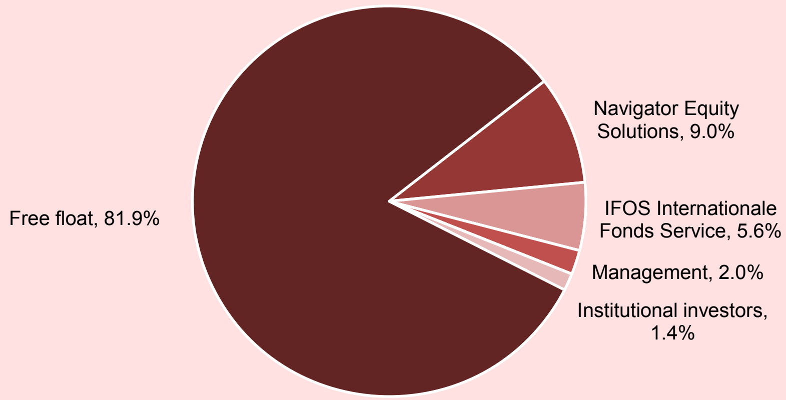
- from EUR 3.788mn to EUR 4.329mn in the second quarter of 2011 (funds inflow of EUR 1.250mn);
- from EUR 4.329mn to EUR 5.487mn in the fourth quarter of 2011 (funds inflow of EUR 1.158mn);
- from EUR 5.487mn to EUR 5.887mn in the first quarter of 2012 (funds inflow of EUR 0.400mn).

All of these capital increases were triggered by DDP's unsatisfactory earnings situation.

Catalis stock characterized by high free float
The company's single largest shareholders are Navigator Equity Solutions SE, which holds approximately 5.3mn or 9.0% of the shares issued, and IFOS Internationale Fonds Service with 3.3mn or 5.6% of shares outstanding. The management holds a total of about 2.0% of the company. No further shareholders with participations in excess of 3.0% are known. According to definition provided by Deutsche Börse, the company's free float stands at 81.9%.

On the basis of 58.9mn shares, the company's market capitalization came to EUR 5.3 at 09 July 2012. The market capitalization of the free-float amounts to EUR 4.3mn.

FIGURE 5: SHAREHOLDER STRUCTURE (AS AT JUNE 2012)



SOURCE: COMPANY DATA, SPHENE CAPITAL

Catalis' single largest shareholder is Navigator Equity Solutions, a private-equity company focusing on the digital media, IT and financial services sectors.

Catalis is organized as a European stock corporation (SE) with a single-tier board structure. Its new executive directors, Dominic Wheatley, Otto Dauer and Peter Biewald, have an excellent track record in the restructuring and repositioning of enterprises. With the turnaround and complete deleveraging of Advanced Medien, which was transformed from an unfocused media conglomerate into the global market leader in inflight entertainment and renamed Advanced Inflight Alliance (AIA), two of these new managers turned a media company assumed to be on the brink of bankruptcy into a highly valuable asset. We see striking similarities between the business models pursued by Advanced Inflight Alliance and Catalis. This is the reason why the AIA success story might be repeated here.

Catalis is a single-tier SE
The legal form of SE (Societas Europaea) allows European companies to operate throughout the European Union as a single legal entity with EU national branches and business sites. Such a structure usually involves bundling the operating subsidiaries under the roof of a holding company. An SE may relocate its registered office from one EU member state to another and preserve its identity without having to dissolve the business entity in the state it leaves and establish a new structure in the state it moves to. This allows an SE to select its registered office on the basis of purely economic considerations. Nevertheless, national differences continue to exist, as the SE directive sets only the underlying framework, which is specified further by national stock corporation legislation. This approach ensures a greater degree of harmonization, but stops short of full congruence.

Catalis has opted in favor of a single-tier board structure
An SE's corporate governance can lie in the hands of a management board and a supervisory board – the structure customary in Germany – or rely on a single-tier board of directors consisting of both executive and non-executive members – the typical approach used in Anglo-Saxon countries (dualistic versus monistic model). Catalis SE has opted in favor of a monistic, or single-tier, board structure. Accordingly, the company's Management Board governs the SE on its own responsibility. It is comprised of seven members, with three executive directors being supervised by four non-executive directors performing functions similar to those of a supervisory board.

The three executive directors are:

- Dominic Wheatley, Member of the Board of Catalis SE since 2008 and Representative of the Board
  Dominic Wheatley, co-founder of Domark Ltd., a software entertainment developer and publisher that merged with Eidos plc, the listed company that subsequently developed Tomb Raider, in 1995. In addition, Dominic Wheatley was the founder and CEO of Bright Things plc. and is Chairman of Kuju plc.
- Otto Dauer, Member of the Board of Catalis SE since 2011 with responsibility for the company's strategic orientation

In his capacity of Director of Strategic Affairs, Otto Dauer is responsible for Catalis' long-term orientation. Between 2001 and 2010, Otto Dauer served as the sole management board member and CEO of Advanced Inflight Alliance (formerly Advanced Medien) and was instrumental in leading the company from insolvency to global market leadership in inflight entertainment. He succeeded in completely deleveraging the company and boosting its revenues from less than EUR 1mn to levels in excess of EUR 100mn. During his tenure, Advanced Inflight Alliance's market capitalization also soared by a factor of more than eight, from less than EUR 5mn to EUR 40mn.

- Peter Biewald, Member of the Board of Catalis SE since 2011 with responsibility for finance, reporting and single-company reporting
  At Advanced Inflight Alliance, Peter Biewald was responsible for finance and the German and international subsidiaries in the period from 2006 to 2010 and occupied the CFO position as of 2007. In addition, Peter Biewald has held various financial positions at Siemens, Computer 2000/Techdata and O2 Germany and senior executive positions on the management boards of Xerion Pharmaceutic AG and G10 Software AG.

The four non-executive directors are:

- Dr. Michael Hasenstab, Member of the Board of Catalis SE since 2002
  Dr. Michael Hasenstab is a member of the Management Board of Navigator Equity Solutions SE and Managing Director of Ascendo Management GmbH, a management consulting firm. Previously, Dr. Michael Hasenstab worked as an investment banker for Credit Suisse First Boston and BNP Paribas in London, where he was responsible for a large number of IPO and M&A transactions in Europe.
- Robert Käss, Member of the Board of Catalis SE since 2002
  Robert Käss is a member of the Management Board of Navigator Equity Solutions SE and Managing Director of Ascendo Management GmbH, a management consulting firm. Previously, Robert Käss founded AdVal Capital Management AG, a financial advisory company, and was involved in various companies and responsible for a number of successful IPO, M&A and turnaround transactions. Robert Käss also serves on the supervisory boards of various unlisted and listed companies.
- Dr. Jens Bodenkamp, Member of the Board of Catalis SE since 2008
  As a business angel, former partner of MCG, a media consulting firm, Managing Director and shareholder of ETF Group and director of Intel's broadband communications program in Europe, Dr. Bodenkamp is a renowned expert in the fields of IT, communications and semiconductor technology. He has published numerous scientific articles and books and holds a patent.
- Seth Hallen, Member of the Board of Catalis SE since 2012
  In addition to his board function, Seth Hallen is CEO of Testronic. Previously, Seth Hallen held the position of VP for the North American activities of Lightworks, a developer and provider of high-end cutting solutions for the film and TV industries. Seth Hallen is a member of the boards of Hollywood Post Alliance (HPA) and International Digital Media Alliance (IDMA). His appointment as a non-executive director on the Catalis board has been proposed to the Annual General Meeting.

Excellent reputation in the fields of deleveraging and restructuring

History might repeat itself, as the business models pursued by Advanced Inflight Alliance and Catalis are very similar.

Dominic Wheatley, Otto Dauer and Peter Biewald have strong track records in the restructuring and repositioning of enterprises. With the turnaround and complete deleveraging of Advanced Medien, which they transformed from an unfocused media conglomerate into the global market leader in inflight entertainment and renamed Advanced Inflight Alliance (AIA), the two executive directors Otto Dauer and Peter Biewald turned a media company assumed to be on the brink of bankruptcy into an extremely profitable and thus highly valuable asset within a few years. The restructuring approach used for Advanced Medien/Advanced Inflight Alliance comprised three elements: 1) deconsolidation of loss-making subsidiaries, 2) complete deleveraging of the company, and 3) a well-thought-out buy-and-build strategy in selected segments with the goal of becoming the global market leader in these niche markets.

We see strong similarities between the business models pursued by Advanced

Inflight Alliance and Catalis. Both companies are market leaders in digital media testing services and quality assurance as well as video games development. A repeat performance of the executive directors' success story should thus be a distinct possibility. By deconsolidating Catalis' loss-making DDP subsidiary, they have, at any rate, already taken an initial step in the direction of turning Catalis into a profitable and focused company.

Strengths & Weaknesses, Opportunities & Threats

Catalis' business model features a number of unique selling propositions (USPs). Decades of experience in video games quality assurance and development give the company a competitive edge that acts as a differentiator within a fragmented market. Opportunities arise from the possibility of further takeover transactions orchestrated by a management team with tried-and-proven acquisition skills, as positive network effects ultimately increase the attractiveness of both business segments. In many cases, games developers have neither the in-house resources nor quality departments large enough to achieve results that are on a par with the testing scope and time to market offered by Testronic. What is more, media companies are increasingly focusing on their core competencies, providing Catalis with an opportunity to take over quality assurance departments earmarked for outsourcing and thus tap new industry and market competences.

External threats mainly arise from the business cycle. Video games are a very cyclical business, with less buoyant economic growth soon being reflected in declining sales figures. In addition to that, competition among games producers is very keen. In the past, this prompted companies from the sector to grant discounts.

Strengths

We see the following company-specific **strengths** of Catalis:

- Catalis is the only independent service provider worldwide to offer one-stop solutions for all services required in the development of video games. Under the FullCycle concept name, the company offers a single-source service package for design, development and production, software localization and software testing, market launch and the associated marketing. Customers benefit from significant efficiency gains compared with order placement for each individual component.
- The different business models pursued by Testronic and Kuju give the company an advantage on the operating front. Above all, different customer groups make for steady and stable revenue trends.
- Hollywood's major studios are gradually converting their tape libraries into digital libraries. Each converted file must undergo final quality control, creating a significant order backlog for the industry. To support this trend, Testronic has set up an FBQC (File Based Quality Control) lab, in which digital data are tested.
- Interoperability Master Format (IMF) is a new format facilitating studios' delivery of one and the same media file to different territories. The fact that quality controls must be performed for all elements of the media file (language, subtitles and metadata) should create substantial long-term market potential for Testronic.
- In the past, Catalis failed to realize sustainable synergy effects between Testronic and Kuju. After our discussions with the new management team, we are convinced that this will change in the medium term. For example, Testronic's entry into the video games testing market is being greatly assisted, if not made possible in the first place, by Kuju's strong market position in this segment.
- Catalis should tend to benefit from the current weakness of the euro. Although the company’s operating business is naturally hedged, as revenues/costs are generated/incurred in the relevant currencies, notably USD and GB, the weakness of the single European currency is leading to currency translation gains from the subsidiaries.

Weaknesses

We see the following company-specific **weaknesses** of Catalis:

- Catalis has already been in breach of the financial covenants of its bank loans for a number of years. Since then, liabilities due to banks have been classified as "short-term". We regard it as highly unlikely that Catalis would be able to satisfy a demand for immediate payment on the part of the lending bank.
- An operating profit was last generated in 2008, while operating losses totaling EUR -6.7mn were accumulated in the three years that followed. This was not only due to the entry into the market for self-published video games. Several corporate actions were required to close this shortfall. It cannot be

ruled out that a further capital increase may become necessary in the current year.

- The markets in which Kuju is active are basically characterized by high competitive intensity. To alleviate the impact of fierce competition, Kuju has built up a presence in several countries, conducts business in various sectors and seeks to consolidate the market through M&A activities. Despite increasing market exits on the part of competitors such as the German games developers Spellbound Entertainment, Reakktor Media or dtp entertainment, which have all filed for bankruptcy this year, price is still one of the dominant drivers of order placement. This means that further price concessions are conceivable in the coming years.
- As a work-for-hire platform, Kuju is subject to stronger and more prolonged repercussions from an economic downturn than Testronic, because its customers buy outsourcing services only when their own development departments are already working to full capacity.
- In games development, Kuju has to stand its ground against a large number of competitors. The quality of its development work will determine whether the company will continue to grow at the same pace as the overall market or even gain market shares at the expense of the competition.
- The free-float market capitalization of EUR 4.3 as of July 09, 2012, is often regarded as too low for commitments by institutional investors. With an average trading volume of only 300,000 shares, or EUR 30.000, per day over the last 52 weeks, the stock's low liquidity also has to be taken into consideration.

Opportunities

The **opportunities** described below apply to all companies active in the same industries as Catalis:

- Global media companies continue to trend towards outsourcing of development and quality assurance functions.
- Even in a recessionary environment, quality assurance remains an indispensable part of media companies' value chain, especially for mass-market products such as data carriers.
- Physical video rental will be increasingly superseded by video streaming going forward, although this trend has not yet been reflected in the figures. Key buzzwords in connection with this development are video on demand (VoD), electronic sell through (EST) and download to own (DTO). This means that 3D will become an increasingly important video format in home entertainment, too. As a market leader in quality assurance and testing, Testronic thus stands to benefit especially from this trend.
- Compared with film production costs, DVD and Blu-ray testing costs are negligible. Given the low price sensibility, persistently high market growth rates and Catalis' leading position in the quality assurance and testing markets, competitive intensity is unlikely to change over the medium-term horizon.
- Both niches in which Catalis is active are still characterized by high market-entry barriers for newcomers. In particular, customer relations that have grown over a long time are a decisive competitive factor for both Testronic and Kuju.
- According to the company's management, Catalis' customer portfolio is characterized by high credit quality. Bad debt is negligible.

Threats

The **threats** described below apply to all companies active in the same industries as Catalis:

- In the US, pioneer of all technological developments in home entertainment, about four fifths of relevant consumer spending went to packaged media in 2011. The remaining 20% was already accounted for by streaming and subscriber-based VOD services such as Netflix, Hulu or Amazon Prime. Should this trend continue and also spread to other countries, this might have adverse long-term effects on Catalis' core business.
- We believe that a change in sentiment against the backdrop of the European

and US debt crisis and a renewed economic slump would affect Catalis' customers to an above-average extent. A cool down in economic growth would thus have a near-term impact on the company's earnings situation.

- In principle, the contracts Catalis concludes with its customers have a limited duration (usually two to three years). Although they tend to be renewed by satisfied customers, there is no guarantee that this will indeed happen. Theoretically, Catalis' competitors might also be in the running for these testing and development assignments.

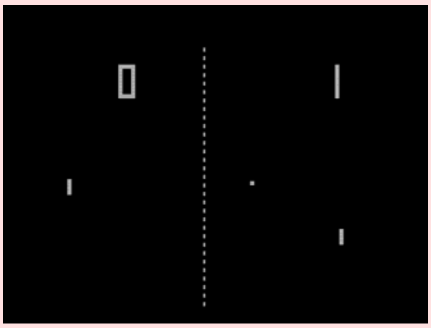
Market and Competitive Analysis

Since the introduction of the gaming arcade classic Pong 40 years ago, the video games industry has evolved from a niche market for a handful of enthusiasts to a serious branch of the entertainment industry. Global video games sales amounted to approximately USD 57.2bn last year – an increase of roughly 60% versus 2006, when Nintendo launched its Wii console. The video games industry is thus twice as large as the music industry, exceeds the revenues of all magazine publishers worldwide by about one fourth and corresponds to approximately two thirds of the film industry. The global video games market is expected to grow to USD 79.5bn by 2015e (CAGR 2011-15e 6.8%). Whereas traditional gaming devices, i.e. consoles and PCs, accounted for significantly more than half of the overall market last year, their weighting will probably decline to levels noticeably below 50% in the next four years, with the two "cutting-edge" platforms, i.e. online and mobile, benefiting from this trend.

The history of video games in one paragraph
Over the last 50 years, video games have evolved from technical trials at universities into one of the most influential leisure-time activities of the 21st century. At the dawn of the video games era, dedicated gaming computers had to be linked to the TV set, so the term "telegame" was coined (Pong being a case in point). The 1970s, by contrast, were dominated by arcade games, i.e. entertainment machines that were mostly installed in shopping malls or gaming arcades, with fast, high-action games with short play times and steep learning curves being the preferred option. In the 1980s, telegames were replaced by console games. Initially, this primarily involved the conversion of arcade games for home use. With the emergence of PCs, console and PC games initially took diverging courses, this trend being subsequently reversed by games developers in the mid-1990s for marketing reasons, as uniform storage media such as CD-ROMs or DVDs and compatible hardware facilitate more cost-efficient parallel video games development for a variety of consoles and PCs.

Games such as Black Ops-Call of Duty generate revenues in excess of USD 1bn within four weeks

FIGURE 6: PONG (1972, LHS), FINAL FANTASY XIV (2012, RHS)



40 years of video games history in two screenshots

SOURCE: SQUARE ENIX, ATARI, SPHENE CAPITAL

Video games are generated by games developers, a.k.a. "studios", where games designers, producers, authors, graphics designers, programmers, level designers, sound engineers, musicians and games testers work together in teams of 20 to 50 developers to create video games. As the games industry has gained greater significance and technology has become increasingly complex, the average number of developers and development times have increased progressively over time. Today, state-of-the-art commercial games have production cycles between one and three years, and their development costs now frequently exceed the mark of USD 15mn.

Only about 5% of all video games launched in the market are profitable

Average life cycles of development studios are short. In many instances, video games are developed by a studio that is dissolved afterwards. Due to this uncertain employment situation, increased congregations of developers in certain regions have become discernible, prompted by the goal of being in a position to join neighboring studios or establish new teams swiftly.

TABLE 5: THE HISTORY OF VIDEO GAMES IN MILESTONES

1962	Development of Spacewar! for mainframe computers, the precursor of Computer Space
1971	The modern era of video games commences with the launch of Computer Space, which is installed in gaming arcades. The developers of Computer Space are Nolan Bushnell and Ted Dabney, who later found Atari.
1972	Atari publishes the gaming arcade classic Pong and sells 19,000 "Pong machines", thereby introducing the world's first commercially successful video game. Magnavox brings the first video gaming console for home use to the market: Magnavox Odyssey.
1977	Second-generation video games, in particular those from SNES, Nintendo 64 and Sega Mega Drive, use proprietary plug-in modules (cartridges or cassettes) for the first time. First crash of the North American video games market, caused by a number of poor-quality Pong clones.
1978	Beginning of the "Golden Era of Arcade Video Games" Taito develops Space Invaders for gaming arcades and, shortly thereafter for consoles (Atari 2600), one of the earliest shooting games. Space Invaders becomes the inspiration for an entire generation of subsequent video games and is ultimately also the reason why video games advance to the position of a global industry.
1979	Atari developers dissatisfied with insufficient pay leave their employer and establish Activision, the world's first third-party games developer. Previously, games had been developed exclusively by the manufacturers of the respective gaming consoles.
1980	Namco publishes Pac-Man First color arcade game CLOAD publishes Dungeons n Dragons, the first RPG (role playing game) on the PC.
1983-85	A number of poor-quality video games and a confusing variety of consoles result in the second crash of the US video games industry after 1977. Within two years, video games revenues in North America plummet 97%, from USD 3.2 billion to approximately USD 0.1 billion.
1984	Emergence of IBM-compatible PCs, known as "home computers": Computer games become an increasingly important platform for video games from a technological and economic perspective, at the expense of console games.
1985	Launch of the Nintendo Entertainment System (NES, or "Nintendo" for short), a third-generation 8-bit video games console and the first platform to be opened for products from third-party developers. Replacement of the joystick by the gamepad, a game controller to be held in both hands, which is still the customary input device for gaming consoles.
1980s	Setup of the European video games industry
1987	Launch of NEC's PC Engine, the first 16-bit console, and emergence of the fourth video games console generation
1988	Commencement of the rivalry between Super Nintendo Entertainment System and Sega Genesis/Sega Mega Drive
1989	Nintendo launches the Game Boy, a portable 8-bit handheld console.
1992	The success of Wolfenstein 3D popularizes the genre of first-person shooter or ego shooter games.
1993	Fifth video games generation, dominated by the Nintendo 64, Sega Saturn and Sony PlayStation consoles. The key hallmark of the fourth generation was the transition from raster graphics to 3D games.
From 1995	Due to limited storage capacity, plug-in modules are increasingly replaced by CD-ROMs ("media war"). Peak of the console war, decline of Atari's and Sega's operating performance.
1996	Launch of Tomb Raider, a franchise product consisting of a video game, comic, novel, theme parks and feature films with Lara Croft as the first virtual icon of the video games industry.
1998	128-bit era, a.k.a. sixth generation. The most familiar platforms are Sony PlayStation 2, the most successful console in the history of computer games with more than 150mn units sold, Microsoft Xbox (21mn), Nintendo GameCube (22mn), and Sega Dreamcast (11mn). The Nokia 6110 offers Snake, the first video game to be delivered on a mobile phone.

SOURCE: SPHENE CAPITAL

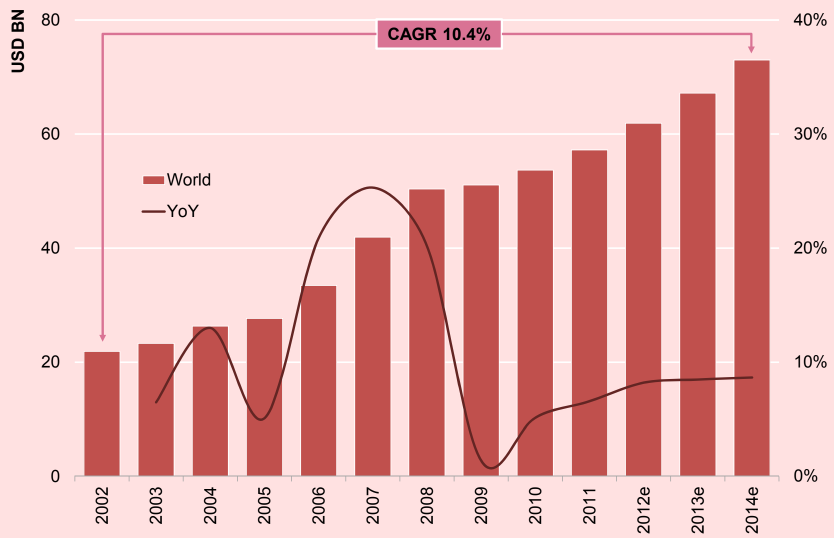
TABLE 5: THE HISTORY OF VIDEO GAMES IN MILESTONES (CONT.)

From 2000	Integration of game functionalities in non-gaming platforms such as mobile phones, MP3 players or PDAs. Consoles are increasingly equipped with modems and DVD players ("media convergence“), commencement of online gaming. Games producers begin to pursue a cross-platform strategy and publish games on different platforms such as PCs, all major gaming and handheld consoles.
2001	Falling prices of broadband internet permit the launch of World of Warcraft (WoW) by Blizzard Entertainment, the first client-based Massively Multiplayer Online Role-Playing Game (MMORPG).
2005	Seventh video games generation with Microsoft's Xbox 360 (HD resolution), Sony's PlayStation 3 (HD resolution and integrated Blu-ray player) and Nintendo's Wii with built-in motion sensor, tapping of new target groups such as women, families, newcomers through simple fitness games than can be learnt intuitively.
2007	Launch of the iPhone, a smartphone with virtual multi-touchscreen, mediaplayer, video camera, PDA, handheld gaming console, Internet connection, WiFi and 3G access – the culmination of media convergence so far.
2008	Comeback of simple, usually browser-based video games (casual games) that are easily accessible, can be learned intuitively and rapidly attract a massive number of players. As social network games, they become especially popular via Facebook (example: Farmville).
2012	Although the average lifecycle of a console generation is five years, no eighth generation has emerged so far. Sony and Microsoft regard the integration of motion sensors as an extension of the seventh generation.

SOURCE: SPHENE CAPITAL

CAGR of 8.6% expected for 2011-14e
According to estimates published by PWC, the global video games market should grow to USD 79.5bn by 2015e, up from USD 57.2bn in 2011. This corresponds to an annual average growth rate of 8.6%. With a CAGR of 16.3%, the Asia-Pacific region should generate above-average rates of expansion. Latin America should rank second (CAGR 10.5%), while North America IS expected to post below-average growth rates.

FIGURE 7: THE GLOBAL VIDEO GAMES MARKET, 2002-2014E



With revenues of USD 57.2bn last year, the global video games market was again characterized by decidedly high growth momentum. Key growth drivers were online and mobile-phone games, which more than offset a slight decline in console games.

SOURCE: PRICEWATERHOUSECOOPERS, WILKOFSKY GRUEN, SPHENE CAPITAL

The video games market has traditionally been subdivided into three segments:

- Classic console games for PS3, Wii or XBOX360, sold as boxed products in the retail trade. All leading manufacturers are represented in this segment, i.e. Electronic Arts (EA), Activision, Ubisoft, Warner, and Disney. Development costs run up to USD 25mn, and average development times are up to two years.
- PC-based multiplayer games such as MMORPGs, sold by manufacturers such as Activision, CCP or NC Soft as boxed products in the retail trade. At an average of three years, development times are longer than for console games. Development costs are higher, too, and may amount to USD 50mn and more. In addition to a one-off fee, purchasers also have to pay monthly subscription fees aimed at covering games producers' maintenance costs.
- Simple, browser-based games in social networks allowing users to go on steep learning curves. They are played within social networks such as Facebook. Leading studios such as Zynga, Playdom or Play Fish develop such casual games in less than six months, at development costs below the mark of USD 0.5mn. The game is free for users; upgrades to more sophisticated levels or certain virtual “toys” usually have to be bought at prices of USD 1-2 per item.

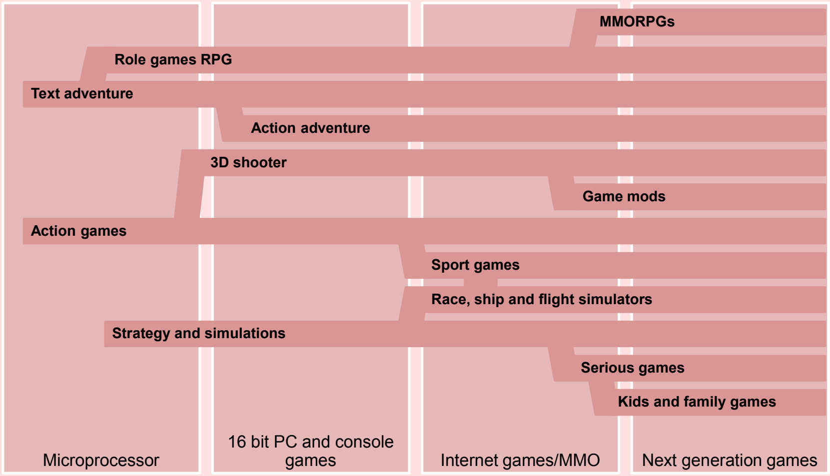
TABLE 6: THREE BUSINESS MODELS FOR VIDEO GAMES

	Multiplayer / Online	Retail Boxes	Social / Browser / Mobile
Game description	Virtual worlds	Action Music Sports Racing games	Simple games with steep learning curves, usually 2D
Examples	World of Warcraft Eve Online Lineage	Call of Duty: Black Ops Guitar Hero Gran Turismo	Farmville Club Penguine
Peers	Activision CCP Microsoft NC Soft	Activision Electronic Arts Ubisoft Warner Bros. Disney Sony Nintendo Konami Capcom SquareEnix	Big Point Game Forge Bob mobile Zynga Playdom Play Fish
Development costs	> USD 50mn	USD 1-25mn	> USD 0.5mn
Maintenance costs	> USD 10mn p.a.	n/a	Depends on business model
Time to market	3 years	1-2 years	1-4 months
Business model	Retail price USD 50	Retail price USD 50	Usually free Sale of in-game items @ USD 1-2 per item
Market size	USD 8bn	USD 25bn	USD 5bn

SOURCE: COMPANY DATA, SPHENE CAPITAL

Consoles still dominant
With a market share of 50%, consoles were still the dominant platform last year. PC games, the second traditional games platform, accounted for a share of 7%, and their trend was pointing down, too. By contrast, "cutting-edge" platforms, i.e. mobile and online, have gradually gained increasing significance in the last few years. This is mainly due to the increasing penetration of smartphones and tablet PCs, whose games are coming closer and closer to console games in terms of their quality and complexity.

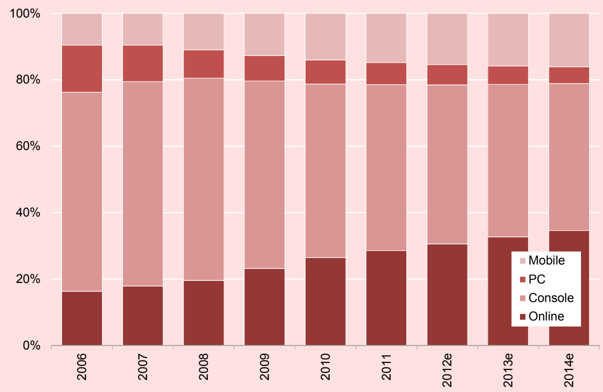
FIGURE 8: OVERVIEW OF VIDEO GAMES

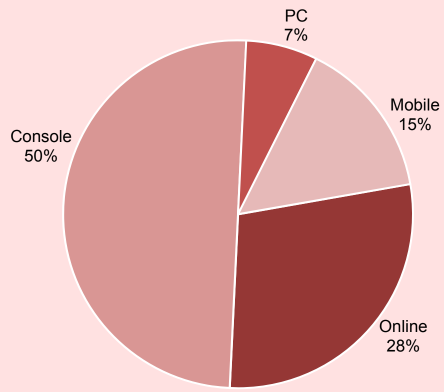


SOURCE: SPHENE CAPITAL

Cloud gaming is bringing additional momentum to the market. Here, games are no longer loaded onto the hardware, but can be started directly on the suppliers' server against payment of a fee. Cloud gaming, too, mainly addresses users of tablet PCs.

FIGURE 9: GLOBAL MARKET BY PLATFORM, 2006-14E (LHS), 2011 (RHS)



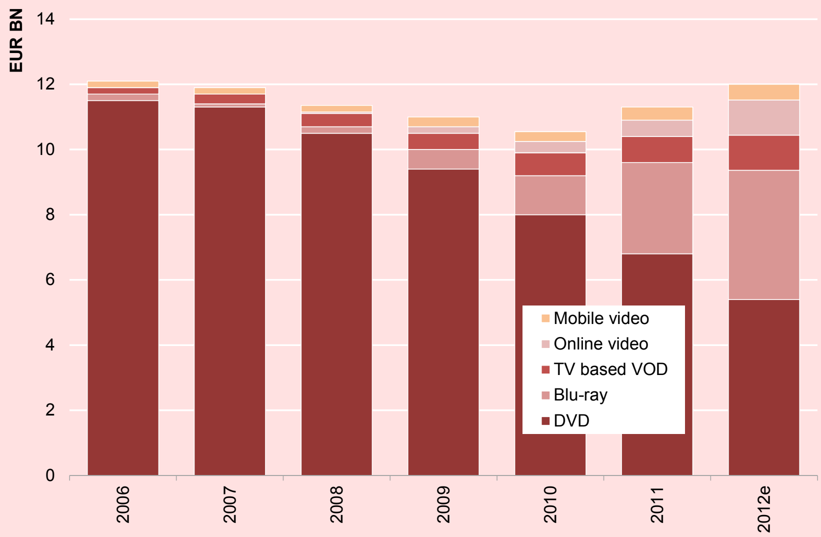


SOURCE: PRICEWATERHOUSECOOPERS, SPHENE CAPITAL

In the third quarter of 2011, the home entertainment industry posted its first positive growth rate since the onset of the financial-markets crisis, and this favorable trend is still intact. One key driver is the increasing penetration of Blu-ray discs and players, due above all to combo packs and 3D Blu-ray discs.

The term "Blu-ray disc" refers to the blue laser used to read the CD. Blue lasers can process information stored at a greater density than is possible with the red laser used for DVD reading. The first Blu-ray disc prototypes were unveiled in October 2000, and the first prototype player was released in April 2003. The first commercial model was released in the trade in June 2006. It is estimated that 105mn Blu-ray players should come to the market in 2015.

FIGURE 10: VIDEO, US RETAIL SALES, 2006-12E



Revenues from package-based video systems, i.e. DVDs and Blu-ray discs, consist of retail sales and the rental business. According to estimates presented by Futuresource, they will account for about 78% of the video market in 2012.

SOURCE: FUTURESOURCE CONSULTING, SPHENE CAPITAL

Main drivers are declining hardware prices and increasing product variety
Falling hardware prices are the key driver behind the success of Blu-ray games in the marketplace. Only six years after the launch of the Blu-ray video format, the prices of Blu-ray players are on a par with those of DVD players:

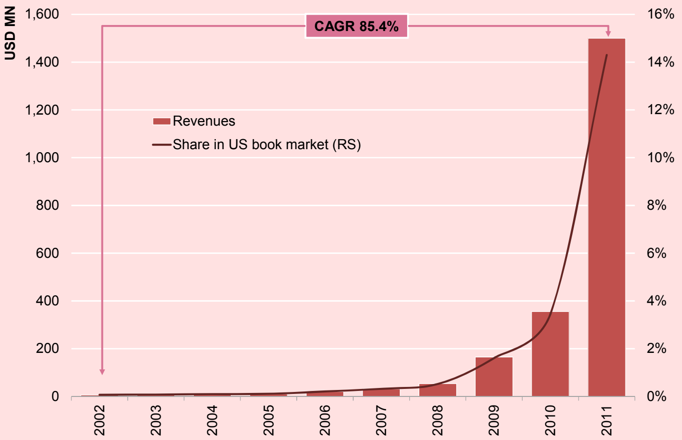
FIGURE 11: US RETAIL SALES PRICES, 2006-12E (LHS), UK BLU-RAY DISC PRICES, 2010 (RHS)

SOURCE: FUTURESOURCE CONSULTING, SPHENE CAPITAL

The market for media product quality assurance is decidedly intransparent, making it difficult to assess Testronic's earnings potential. There are no publicly accessible market or competitive analyses, and the individual peer companies' market shares are not published either.

One out of seven books sold in the US in 2011 was an e-book
Another market that is relevant for Catalis is e-book testing. Although the market research company GfK indicated that the share of e-books in the German domestic end-user book market (excluding schoolbooks and textbooks) was only about 1.0% last year (up from 0.5% in the previous year), the number of e-books sold is rising markedly: 4.7mn paid books were downloaded in Germany last year, which corresponds to a value of EUR 38mn (+77% versus 2010). Half of all publishing houses have now added e-books to their offerings. In the US, the 950,000 titles available already account for shares of 6.2% of total book sales and 13.6% of novels sold. Worldwide, 5.2% of all book sales were generated with e-books – USD 3.9bn out of a total of USD 75.8bn.

FIGURE 12: US E-BOOK SALES, 2002-2011



SOURCE: USA TODAY, SPHENE CAPITAL

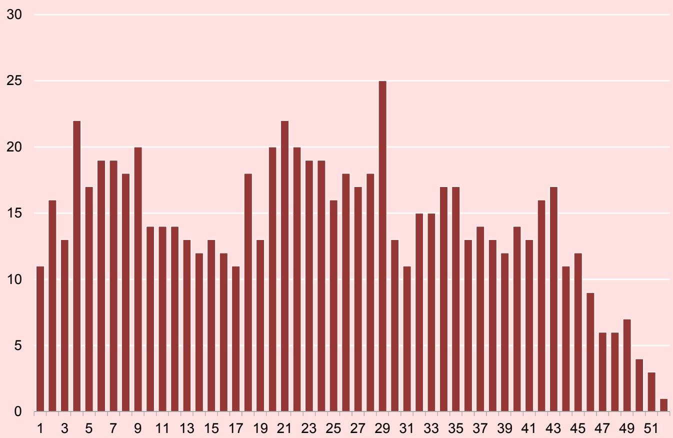
Last year, one out of seven books sold in the US was already an e-book.

Key drivers of the e-book market are

- Increasing penetration rates of e-book readers
- Cheaper purchase prices for e-books than for paper books
- Increasing number of e-books available at publishing houses
- Increasing willingness to use mobile reading devices
- Increasing number of market participants in the e-book segment
- Flexible payment options (pay per download, subscription models, advertising models, etc.)

In Germany, 1.6mn people are owners of e-readers in 2012, up from 380,000 in 2011. In addition, there are approximately 3.2mn tablet PCs, which can also be used for reading e-books (Source: GfK).

FIGURE 13: NUMBER OF BOOKS ON THE US TOP 50 LIST OF WHICH MORE E-BOOKS THAN PAPER COPIES WERE SOLD IN 2011



SOURCE: USA TODAY, SPHENE CAPITAL

On average in 2011, more e-books than conventional copies were sold for 15 titles on the top 50 bestseller list.

Stock Performance

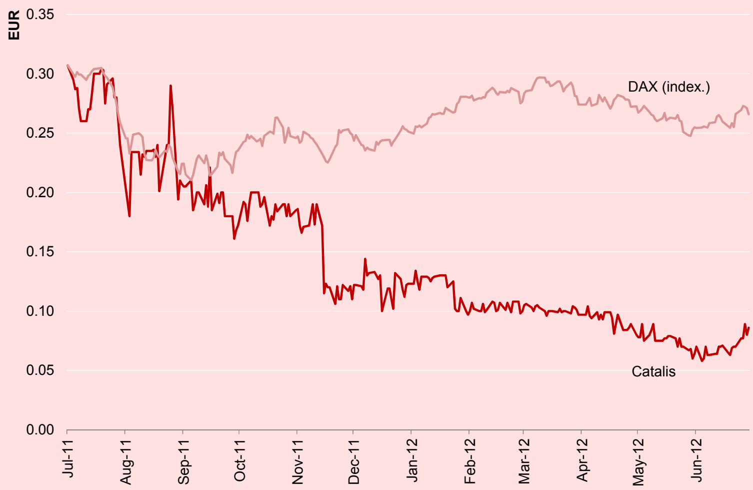
On balance, investors holding Catalis stock experienced only strong underperformance throughout the last few years, both in absolute terms and versus the Germany Stock Index, the DAX. The same applies to the twelve-month period, with the downward movement accelerating even further after publication of the 2011 annual financial statements. However, we expect the Catalis stock to rank among the outperformers on the German tickers in the coming twelve months, as operating prospects brighten and the company focuses on its core business.

Stock price performance, LTM
With few exceptions, the price of the Catalis stock has moved in one direction only, both on a year-to-date basis and over the last twelve months: down. At a price of EUR 0.09, it is currently trading in the vicinity of its all-time lows. This puts the stock currently 34.8% and 72.0% below the price levels recorded at the start of year and twelve months ago, respectively.

Against the backdrop of currently approximately 58.9mn shares, the company's market capitalization on the basis of the stock's latest closing price of EUR 0.09 comes to EUR 5.3mn. The market capitalization of the free-float portion amounts to roughly EUR 4.3mn.

Analysis of share price performance indicates the stock is oversold
The Catalis stock has lost 34.8% YTD. This compares with an 8.7% increase for the DAX. Consequently, we cannot rule out that the company’s weak share price perfomance was solely driven by macroeconomic concerns or a shift in the investor preference from small to large caps. We note a missing track record for the company due to its previous management performance; but fears that Catalis could suffer disproportionately in an economic downturn scenario versus customer industries clearly lack substance, in our view. Therefore, the chart below is supporting our view that the Catalis stock is currently oversold.

FIGURE 14: STOCK PERFORMANCE, LTM



SOURCE: ONVISTA, SPHENE CAPITAL

Stock price performance over the last five years
The picture changes little if we extend the period under review to five years (see figure 15 in this respect). Compared to the high of EUR 1.26 reached in June 2007, the stock has thus lost more than 94% of its value.

The company's IPO took place in July 2000 at the height of the "Neuer Markt" boom
The Catalis stock is traded on the Regulated Market of the Frankfurt Stock Exchange (General Standard segment), on Xetra and on the Stuttgart, Munich and Berlin exchanges. As a company listed on the Regulated Market, Catalis is quoted in a market segment subject to statutory regulations. Transparency re-

quirements are much higher than in the Entry Standard segment. Among other things, companies listed in the General Standard segment undertake to:

- publish annual reports no later than four months after yearend;
- publish half-year reports no later than two months after the mid-year mark;
- submit interim releases on the first and third quarters;
- comply with ad-hoc disclosure obligations under the German Securities Trading Act (WpHG);
- disclose directors' dealings as stipulated in the WpHG;
- publish statements on notification thresholds, and
- submit a mandatory offer in the event of a change of control.

FIGURE 15: STOCK PERFORMANCE OVER 5 YEARS

SOURCE: ONVISTA, SPHENE CAPITAL

Income-statement & balance-sheet projections

Catalis' core business revolves around services ordered by leading media companies. By contrast, product sales will no longer play a role in the future. Due to the company's lean, but personnel-intensive business model, staff capacity utilization is a critical success factor. Whereas Testronic's employees have to work their way through a predefined checklist without error, their colleagues at Kuju are decidedly creative and develop game ideas of their own, which are then presented to customers and developed on behalf of the latter to market maturity in compliance with the agreed budgets.

Discontinuation of DDP's massively loss-making development activities alone should allow Catalis to break even in the current year. In our view, the guidance announced by the new management, i.e. generation of an operating profit of EUR 0.8-1.2mn on revenues of EUR 28-30mn, is both credible and achievable.

At the segment level, we expect Testronic to generate average annual growth rates of 16.6% in the period through 2013e. For Kuju, we are penciling in higher growth rates in 2013e than in 2012e, as the eighth console generation will probably be launched in the coming year; on balance, the average annual growth rate should come to 15.2% in 2012e and 2013e.

Our calculations imply 2012e revenues of EUR 30.2mn (+14.4%) and EBIT of EUR 1.0mn. Both estimates are in line with the management's guidance. Our 2013e revenue and EBIT projections are EUR 35.3mn and EUR 2.0mn, respectively. According to our estimates, the EBIT margin should improve to 5.7% by 2013e. This translates into 2012e and 2013e earnings per share (EPS) of EUR 0.01 and EUR 0.03, respectively.

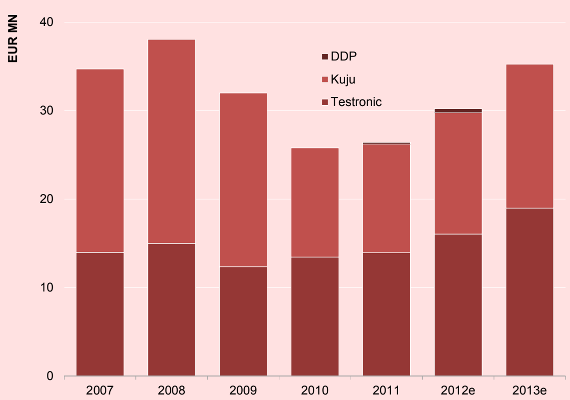
Given the covenant breach, the management team will focus on the company's deleveraging going forward. This means that dividend payouts are unlikely for the time being. The expected earnings retention should help boost the equity ratio from 29.3% in 2011 to 39.3% in 2013e.

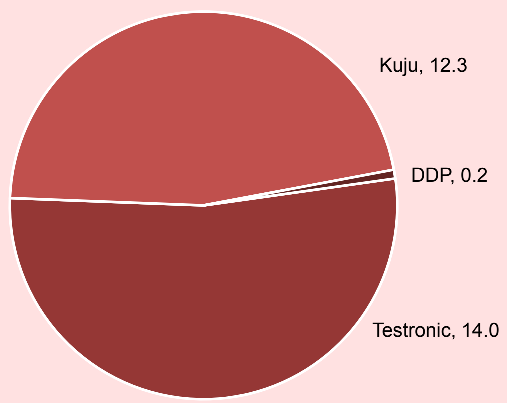
Catalis' business model is based on the generation of service revenues. This means that staff capacity utilization is the decisive factor for the company's economic success. The models pursued by the two business segments differ in this respect: Whereas Testronic's employees have to complete a predefined checklist without error, Kuju's staff members develop game ideas of their own, which are then presented to customers and developed on behalf of the latter to market maturity in compliance with the agreed budgets. Key success factors for Testronic are absence of errors and time to market and for Kuju, budget and deadline compliance.

The company returned to a growth path in 2011
Last year, Catalis generated revenues of EUR 26.4mn (+2.4% YoY), with Testronic and Kuju accounting for EUR 14.0mn and EUR 12.3mn thereof, respectively. The remaining contribution – slightly under EUR 0.2mn – was made by DDP. This means that revenues went up for the first time since 2008. Nevertheless, 2011 consolidated revenues were still 30.6% below the level recorded before the financial-markets crisis.

Testronic and Kuju accounted for shares of 53.0% and 46.6%, respectively, in 2011 revenues.

FIGURE 16: REVENUES BY SEGMENT (LHS), 2011 (RHS)





SOURCE: COMPANY DATA, SPHENE CAPITAL

Measures to boost staff capacity utilization
To achieve further accelerated growth in the current year, the company's management has developed a bundle of measures, which includes strict focus on business development (i.e. client acquisition), detailed analysis of existing projects with regard to profitability and hiring key personnel.

We expect average revenue growth of 15.5% per annum in 2012e/2013e
In absolute terms, we expect consolidated revenues to climb to EUR 30.2mn this year (+14.4%) and EUR 35.3mn (+16.7%) in 2013e. This translates into an annual growth rate of 15.5% for the 2012e-2013e period. Testronic should post above-average rates of expansion (2011-13e CAGR 16.6%), while Kuju should record only slightly less buoyant growth, with an average annual rate of 15.2%. This underscores the distinct homogeneity of Catalis' business model.

The expected improvement in staff capacity utilization should be reflected directly in EBIT.

We forecast a 2013e EBIT margin of 5.7%
After a figure of EUR -3.5mn in the previous year, we are looking for EBIT to climb to EUR 1.0mn in the current 2012e fiscal year, corresponding to a margin of 3.3%. This operating improvement should be due not only to deconsolidation of the loss-making DDP entity in conjunction with the cost-reduction measures that have been initiated, but also to the enhanced staff capacity utilization we anticipate. Our estimates are supported by management's guidance, which forecasts an increase in operating profit to a range of EUR 0.8-1.2mn.

FIGURE 17: EBIT AND EBIT MARGIN (LHS), EBIT YOY (RHS)

SOURCE: COMPANY DATA, SPHENE CAPITAL

Cost-of-materials ratio unchanged
The cost-of-materials item mainly comprises subcontracting costs and amounted to EUR 4.6mn last year. This corresponds to a gross profit margin of 82.6% (down from 85.4% in 2010). Catalis does not incur any noteworthy R&D expenses. Internally generated intangible assets worth EUR 1.7mn were capitalized at Kuju. We expect to see comparable cost items in subsequent years.

Strategic collaboration with a leading social games developer

Personnel costs slightly to increase
At the end of 2011, Catalis had 331 employees, i.e. 13 less than at the same date of the previous year. Out of this total, 194 (207) worked for Testronic, 117 (123) for Kuju and 17 (25) for DDP. The holding company had 3 (2) employees. The average number of employees working for Catalis was 350 in 2011, down from 366 in the previous year. Despite the slight decline in the workforce, staff expenses showed a surprisingly strong increase last year, from EUR 15.6mn to EUR 16.1mn. The personnel expense ratio thus rose slightly from 60.3% to 60.9%.

We expect a noticeable improvement in the personnel expense ratio in 2012e and 2013e, with declines to 57.5% and 55.8% of revenues, respectively, as the number of employees should move down to 330 this year and further productivity gains should be achieved in 2013e.

From the current year onward, Testronic should boost its staff capacity utilization significantly, not least due to a strategic collaboration with a leading developer of social games. A cooperation agreement has been concluded for this purpose, which provides for Testronic hiring up to 100 employees by 2013e for exclusive deployment in these projects.

Substantial non-recurring items in 2011
In 2011, Catalis posted non-recurring costs of EUR 5.8mn. Three types of cost were involved in this item:

- EUR 1.7mn from the impairment on the participation in DDP
- EUR 0.6mn from revenue realization at Kuju
- EUR 3.6mn from the de-recognition of deferred tax assets.

FIGURE 18: RECONCILIATION FROM REPORTED TO ADJUSTED EBIT, 2011

SOURCE: COMPANY DATA, SPHENE CAPITAL

Pre-tax margin to increase from -14.4% in 2011 to 5.1% in 2013e
After a loss of EUR -3.8mn in 2011, we expect profit before tax to move up to EUR 0.6mn in 2012e and EUR 1.8mn in 2013e. One key component of the restructuring activities initiated by the new management is a project aimed at deleveraging the company as soon as possible. We therefore expect interest-rate expenses to decrease noticeably in the next few years.

.

2011 tax rate burdened by de-recognition of deferred tax assets
Last year, the de-recognition of deferred tax assets resulted in a high tax burden of EUR 3.6mn, after a tax refund of EUR 0.2mn had continued to be posted in the previous year.

High tax-loss carry-forwards will lead to negligible tax burdens in the coming years.

From losses incurred in past periods, Catalis has off-balance corporate-income-tax loss carry-forwards of approximately EUR 20.0mn at its disposal. Under German law, losses that have not been offset can be deducted from income in subsequent periods – without limitation up to a total income of EUR 1.0mn and with a percentage of up to 60% for the amount exceeding the threshold of EUR 1.0mn. We therefore expect Catalis to record only low tax rates during our fore-cast horizon.

Net annual income and earnings per share
After taxes and minority interests, we arrive at consolidated net annual income of EUR 0.6mn and EUR 1.7mn for 2012e and 2013e, respectively. The net margin should thus increase from 1.9% in the current to 4.9% in the coming fiscal year. On the basis of 58.9mn shares, our projections translate into earnings per share (EPS) of EUR 0.01 in 2012e and EUR 0.03 in 2013e.

EPS should improve to EUR 0.03 by 2013e.

ROE to increase to 19.5% in 2013e
According to our estimates, return on equity (ROE) should improve from -74.9% in 2011 to 7.3%, with net income benefiting from DDP's deconsolidation in particular. In subsequent years, we expect a further improvement in profitability

Earnings quality will improve gradually

measured as a percentage of equity – despite a reduction in the company's debt burden and, hence, lower leverage. Key reasons are again (1) the expected uptrend in operating profit and (2) Catalis' lean capital structure.

TABLE 7: RETURN ON EQUITY ON THE BASIS OF THE DUPONT METHODOLOGY

	2006	2007	2008	2009	2010	2011	2012e	2013e
ROE	**47.3%**	**16.5%**	**16.7%**	**-2.1%**	**-17.9%**	**-74.9%**	**7.3%**	**19.5%**
Net margin	**19.2%**	**5.3%**	**5.6%**	**-0.9%**	**-9.2%**	**-28.1%**	**1.9%**	**4.9%**
EBIT margin	23.2%	7.7%	7.7%	-4.7%	-6.6%	-13.4%	3.3%	5.7%
Interest expenses	83.4%	62.2%	70.9%	132.3%	151.5%	106.8%	59.1%	88.8%
Tax burden	99.2%	109.9%	102.5%	14.2%	91.8%	195.9%	96.6%	97.8%
Asset turnover	**97.5%**	**131.9%**	**134.3%**	**115.9%**	**93.9%**	**100.4%**	**122.8%**	**144.2%**
Leverage	**252.5%**	**237.6%**	**223.7%**	**207.7%**	**207.2%**	**265.1%**	**317.7%**	**273.1%**

SOURCE: COMPANY DATA, SPHENE CAPITAL

We do not expect any dividends in the near future

Catalis will not begin to distribute dividends in the period until 2013e.

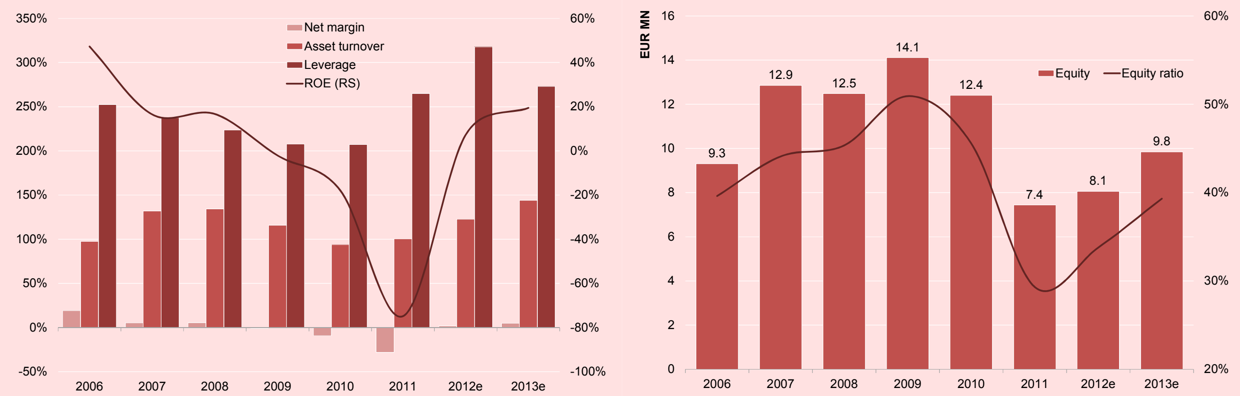
Catalis has not distributed any dividends to shareholders to date. Given the declining equity ratio and envisaged deleveraging of the company, we do not expect any payouts during our short-term forecast horizon either.

Cash flow in sync with earnings

Free cash flows to rise again

We expect free cash flow and net income to move in sync in the coming years. For 2012e and 2013e, we have assumed that the required investments in tangible fixed assets should amount to only EUR 0.5-0.6mn per annum. On balance, this should translate into free cash flows of EUR 1.2mn and EUR 2.1mn in 2012e and 2013e, respectively.

FIGURE 19: ROE (LHS), EQUITY AND EQUITY RATIO (RHS)



SOURCE: COMPANY DATA, SPHENE CAPITAL

Catalis' business model is "asset light"

The capital intensity of Catalis' business model is low. Investments in tangible fixed assets amounted to EUR 1.0mn last year, with special emphasis on the setup of an FBQC lab in Burbank and expansion of the testing lab in Belgium. For 2012e and 2013e, we are penciling in stable capex at a low level.

Capital measures to cover DDP's operating losses

In the last twelve months, Catalis implemented three capital increases.

- June 2011: Capital increase cum rights by EUR 0.541mn, to EUR 4.329mn, producing a funds inflow of EUR 1.250mn
- October 2011: Capital increase cum rights by EUR 1.158mn, to EUR 5.487mn, producing a funds inflow of EUR 1.158mn
- January 2012: Capital increase with rights exclusion by EUR 0.400mn, to EUR 5.887mn, producing a funds inflow of EUR 0.400mn

Net working capital
At the end of 2011, net working capital stood at EUR 9.7mn. Inventories and trade accounts payable accounted for more or less equal parts of this total.

Guidance
The Management Board published a guidance on expected earnings at an early stage. According to these forecasts, revenues are expected to climb to EUR 28-30mn in the current business year. This would correspond to growth between 6.0% and 13.6% versus 2011. The EBIT guidance presented by Catalis' management is EUR 0.8-1.2mn, which translates into an underlying operating profit margin between 2.7% and 4.3%.

The Q1 figures do not yet reflect the strategy the management has embarked on with the deconsolidation of DDP. The company's operating result fell short of the previous year's level.

Earnings trend in Q1/2012
In the first quarter of 2012, the company generated consolidated revenues of EUR 6.9mn (+13.8% versus Q1/2011). At EUR 0.1mn, EBIT was slightly below the year-earlier figures of EUR 0.2mn (with rounding effects implying a more pronounced decline than was actually the case). This was due to a significantly less bullish market environment in the games business. Net income dipped into negative territory (EUR -0.1mn), after a positive figure of EUR 0.1mn had still been posted in the same quarter of the previous year.

Profit and loss account

		2006	2007	2008	2009	2010	2011	2012e	2013e	2014e
Revenues	**kEUR**	**11,464**	**34,727**	**38,063**	**32,005**	**25,793**	**26,415**	**30,226**	**35,264**	**39,858**
YoY	%	n/a	202.9%	9.6%	-15.9%	-19.4%	2.4%	14.4%	16.7%	13.0%
Cost of materials	kEUR	-1,845	-5,262	-3,635	-4,398	-3,758	-4,585	-4,700	-5,576	-6,732
in % of sales	%	-16.1%	-15.2%	-9.5%	-13.7%	-14.6%	-17.4%	-15.6%	-15.8%	-16.9%
Personnel costs	kEUR	-5,042	-20,497	-22,565	-20,054	-15,563	-16,089	-17,389	-19,674	-21,051
in % of sales	%	-44.0%	-59.0%	-59.3%	-62.7%	-60.3%	-60.9%	-57.5%	-55.8%	-52.8%
General and administration	kEUR	-1,700	-5,251	-7,665	-7,345	-6,813	-6,836	-6,231	-7,405	-8,805
in % of sales	%	-14.8%	-15.1%	-20.1%	-22.9%	-26.4%	-25.9%	-20.6%	-21.0%	-22.1%
EBITDA	**kEUR**	**2,877**	**3,717**	**4,198**	**208**	**-341**	**-1,095**	**1,905**	**2,609**	**3,269**
EBITDA margin	%	25.1%	10.7%	11.0%	0.6%	-1.3%	-4.1%	6.3%	7.4%	8.2%
YoY	%	n/a	29.2%	12.9%	-95.0%	n/a	221.1%	n/a	36.9%	25.3%
Depreciation & amortization	kEUR	-216	-1,041	-1,282	-1,698	-1,363	-2,453	-917	-598	-619
Depreciation of fixed assets	kEUR	-209	-915	-1,176	-1,395	-1,203	-847	-618	-598	-619
Amortization of intangibles	kEUR	-7	-126	-106	-84	-66	-484	-299	0	0
Impairment	kEUR	0	0	0	-219	-94	-1,122	0	0	0
EBIT	**kEUR**	**2,661**	**2,676**	**2,916**	**-1,490**	**-1,704**	**-3,548**	**988**	**2,011**	**2,650**
EBIT margin	%	23.2%	7.7%	7.7%	-4.7%	-6.6%	-13.4%	3.3%	5.7%	6.6%
YoY	%	n/a	0.6%	9.0%	-151.1%	14.4%	108.2%	-127.9%	103.4%	31.8%
Financial income	kEUR	-442.00	-1011.00	-849.00	-481.00	-878.00	-243.00	-404.00	-226.00	-143.00
Interest income	kEUR	-231.00	-764.00	13.00	49.00	8.00	5.00	14.00	19.00	27.00
Interest expense	kEUR	-211.00	0.00	-543.00	-312.00	-271.00	-389.00	-300.00	-245.00	-170.00
Other financial income	kEUR	0.00	0.00	198.00	84.00	-149.00	-95.00	0.00	0.00	0.00
Currency translation effects	kEUR	0.00	-247.00	-517.00	-302.00	-466.00	236.00	-118.00	0.00	0.00
EBT	**kEUR**	**2,219**	**1,665**	**2,067**	**-1,971**	**-2,582**	**-3,791**	**584**	**1,785**	**2,507**
EBT margin	%	19.4%	4.8%	5.4%	-6.2%	-10.0%	-14.4%	1.9%	5.1%	6.3%
Income taxes	kEUR	-18	165	51	1,692	211	-3,637	-20	-40	-240
Tax ratio	%	-0.8%	9.9%	2.5%	-85.8%	-8.2%	95.9%	-3.4%	-2.2%	-9.6%
Net profit	**kEUR**	**2,201**	**1,830**	**2,118**	**-279**	**-2,371**	**-7,428**	**564**	**1,745**	**2,267**
Minorities	kEUR	0	0	0	0	0	0	0	0	0
Net profit after minorities	**kEUR**	**2,201**	**1,830**	**2,118**	**-279**	**-2,371**	**-7,428**	**564**	**1,745**	**2,267**
Net margin	%	19.2%	5.3%	5.6%	-0.9%	-9.2%	-28.1%	1.9%	4.9%	5.7%
YoY	%	n/a	-16.9%	15.7%	-113.2%	749.8%	213.3%	-107.6%	209.1%	29.9%
Number of shares	1,000	22,959	26,890	26,890	36,328	37,879	43,047	58,872	58,872	58,872
Number of shares diluted	1,000	27,323	29,630	28,643	36,650	37,879	43,047	58,872	58,872	58,872
EPS basic	**EUR**	**0.10**	**0.07**	**0.08**	**-0.01**	**-0.06**	**-0.17**	**0.01**	**0.03**	**0.04**
EPS diluted	**EUR**	**0.08**	**0.06**	**0.07**	**-0.01**	**-0.06**	**-0.17**	**0.01**	**0.03**	**0.04**

SOURCE: COMPANY DATA, SPHENE CAPITAL

Profit and loss account (quarterly 2012e)

		Q1/2012	Q2/2012	H1/2012	Q3/2012e	9M/2012e	Q4/2012e	2012e
Revenues	**kEUR**	**6,902**	**8,891**	**15,793**	**8,393**	**24,186**	**6,040**	**30,226**
YoY	%	13.8%	19.0%	16.7%	13.4%	15.5%	10.3%	14.4%
Cost of materials	kEUR	-801	-1,511	-2,312	-1,226	-3,538	-1,162	-4,700
in % of sales	%	-11.6%	-17.0%	-14.6%	-14.6%	-14.6%	-19.2%	-15.6%
Personnel costs	kEUR	-4,206	-4,585	-8,791	-4,482	-13,272	-4,117	-17,389
in % of sales	%	-60.9%	-51.6%	-55.7%	-53.4%	-54.9%	-68.2%	-57.5%
General and administration	kEUR	-1,487	-1,753	-3,240	-1,631	-4,871	-1,361	-6,231
in % of sales	%	-21.5%	-19.7%	-20.5%	-19.4%	-20.1%	-22.5%	-20.6%
EBITDA	**kEUR**	**408**	**1,042**	**1,450**	**1,055**	**2,505**	**-599**	**1,905**
EBITDA margin	%	5.9%	11.7%	9.2%	12.6%	10.4%	-9.9%	6.3%
YoY	%	6.8%	92.6%	57.1%	443.8%	124.2%	-72.9%	n/a
Depreciation and amortization	kEUR	-310	-309	-619	-145	-764	-153	-917
Depreciation of fixed assets	kEUR	-160	-160	-320	-145	-465	-153	-618
Amortization of intangibles	kEUR	-150	-149	-299	0	-299	0	-299
Impairment	kEUR	0	0	0	0	0	0	0
EBIT	**kEUR**	**98**	**733**	**831**	**910**	**1,741**	**-752**	**988**
EBIT margin	%	1.4%	8.2%	5.3%	10.8%	7.2%	-12.5%	3.3%
YoY	%	-38.0%	137.1%	77.9%	n/a	250.2%	-81.4%	-127.9%
Financial income	kEUR	-190.00	-72.00	-262.00	-70.00	-332.00	-72.00	-404.00
Interest income	kEUR	3.00	3.00	6.00	5.00	11.00	3.00	14.00
Interest expense	kEUR	-75.00	-75.00	-150.00	-75.00	-225.00	-75.00	-300.00
Other financial income	kEUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Currency effects	kEUR	-118.00	0.00	-118.00	0.00	-118.00	0.00	-118.00
EBT	**kEUR**	**-92**	**661**	**569**	**840**	**1,409**	**-824**	**584**
EBT margin	%	-1.3%	7.4%	3.6%	10.0%	5.8%	-13.6%	1.9%
Income taxes	kEUR	10	-10	0	-10	-10	-10	-20
Tax ratio	%	-10.9%	-1.5%	0.0%	-1.2%	-0.7%	1.2%	-3.4%
Net profit	**kEUR**	**-82**	**651**	**569**	**830**	**1,399**	**-834**	**564**
Minorities	kEUR	0	0	0	0	0	0	0
Net profit after minorities	**kEUR**	**-82**	**651**	**569**	**830**	**1,399**	**-834**	**564**
Net margin	%	-1.2%	7.3%	3.6%	9.9%	5.8%	-13.8%	1.9%
YoY	%	n/a	211.3%	96.8%	n/a	572.4%	-89.1%	-107.6%
Number of shares	1,000	58,872	58,872	58,872	58,872	58,872	58,872	58,872
Number of shares diluted	1,000	58,872	58,872	58,872	58,872	58,872	58,872	58,872
EPS basic	**EUR**	**0.00**	**0.01**	**0.01**	**0.01**	**0.02**	**-0.01**	**0.01**
EPS diluted	**EUR**	**0.00**	**0.01**	**0.01**	**0.01**	**0.02**	**-0.01**	**0.01**

SOURCE: COMPANY DATA, SPHENE CAPITAL

Balance sheet

		2006	2007	2008	2009	2010	2011	2012e	2013e	2014e
Non-current assets	**kEUR**	**10,081**	**18,586**	**17,694**	**19,148**	**20,351**	**17,312**	**16,173**	**16,171**	**15,581**
Goodwill	kEUR	6,899	14,950	13,237	13,461	14,105	14,331	14,331	14,331	14,331
Intangible Assets	kEUR	62	364	197	129	906	997	0	0	0
Property, plant, equipment	kEUR	966	1,861	2,546	2,246	1,598	1,794	1,652	1,650	1,060
Investments	kEUR	866	0	0	0	0	0	0	0	0
Deferred tax	kEUR	1,288	1,411	1,714	3,312	3,742	190	190	190	190
Current assets	**kEUR**	**13,424**	**10,567**	**9,841**	**8,567**	**6,874**	**8,073**	**7,681**	**8,880**	**10,542**
Trade receivables	kEUR	3,584	4,584	5,489	2,817	3,605	4,035	4,110	4,843	5,529
Inventories	kEUR	0	0	0	0	0	0	0	0	0
Tax and social securities	kEUR	151	124	119	569	77	222	35	20	0
Other assets	kEUR	1,028	3,128	3,046	3,797	2,049	2,929	2,699	2,780	2,863
Income tax	kEUR	115	9	61	284	178	87	0	0	0
Cash and cash equivalents	kEUR	8,546	2,722	1,126	1,100	965	800	837	1,237	2,150
Total assets	**kEUR**	**23,505**	**29,153**	**27,535**	**27,715**	**27,225**	**25,385**	**23,854**	**25,051**	**26,123**
Equity	**kEUR**	**9,310**	**12,856**	**12,484**	**14,113**	**12,406**	**7,439**	**8,058**	**9,848**	**12,355**
Share capital	kEUR	2,296	2,689	2,689	3,788	3,788	5,887	5,887	5,887	5,887
Share premium	kEUR	15,747	18,540	18,540	18,808	18,808	19,384	19,384	19,384	19,384
Share based payments	kEUR	37	731	779	366	379	406	434	465	497
Accumulated deficit	kEUR	-8,623	-7,314	-5,162	-5,003	-7,374	-14,802	-14,238	-12,493	-10,226
Currency differences	kEUR	-147	-1,790	-4,362	-3,846	-3,195	-3,436	-3,410	-3,395	-3,188
Non-current liabilities	**kEUR**	**10,838**	**8,233**	**6,629**	**187**	**102**	**190**	**190**	**196**	**202**
Long term debt	kEUR	10,598	8,180	6,420	0	0	0	0	0	0
Finance lease obligation	kEUR	0	0	145	91	0	0	0	0	0
Deferred tax liabilities	kEUR	240	53	64	96	102	190	190	196	202
Current liabilities	**kEUR**	**3,357**	**8,064**	**8,422**	**13,415**	**14,717**	**17,756**	**15,606**	**15,007**	**13,567**
Loans	kEUR	0	0	880	6,420	5,540	8,625	8,232	7,500	5,000
Bank overdraft	kEUR	0	8	948	1,084	2,281	1,722	1,000	0	0
Finance lease obligation	kEUR	0	0	106	186	113	0	0	0	0
Trade and other payables	kEUR	2,855	5,073	3,738	3,779	5,967	5,465	6,316	7,443	8,496
Taxes and social securities	kEUR	150	1,321	2,455	595	732	1,295	0	0	0
Income tax payables	kEUR	274	10	207	109	84	53	58	64	71
Provisions	kEUR	78	1,652	88	1,242	0	596	0	0	0
Total liabilities	**kEUR**	**23,505**	**29,153**	**27,535**	**27,715**	**27,225**	**25,385**	**23,854**	**25,051**	**26,123**

SOURCE: COMPANY DATA, SPHENE CAPITAL

Balance sheet (normalized)

		2006	2007	2008	2009	2010	2011	2012e	2013e	2014e
Non-current assets	**%**	**43%**	**64%**	**64%**	**69%**	**75%**	**68%**	**68%**	**65%**	**60%**
Goodwill	%	29%	51%	48%	49%	52%	56%	60%	57%	55%
Intangible Assets	%	0%	1%	1%	0%	3%	4%	0%	0%	0%
Property, plant, equipment	%	4%	6%	9%	8%	6%	7%	7%	7%	4%
Investments	%	4%	0%	0%	0%	0%	0%	0%	0%	0%
Deferred tax	%	5%	5%	6%	12%	14%	1%	1%	1%	1%
Current assets	**%**	**57%**	**36%**	**36%**	**31%**	**25%**	**32%**	**32%**	**35%**	**40%**
Trade receivables	%	15%	16%	20%	10%	13%	16%	17%	19%	21%
Inventories	%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Tax and social securities	%	1%	0%	0%	2%	0%	1%	0%	0%	0%
Other assets	%	4%	11%	11%	14%	8%	12%	11%	11%	11%
Income tax	%	0%	0%	0%	1%	1%	0%	0%	0%	0%
Cash and cash equivalents	%	36%	9%	4%	4%	4%	3%	4%	5%	8%
Total assets	**%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Equity	**%**	**40%**	**44%**	**45%**	**51%**	**46%**	**29%**	**34%**	**39%**	**47%**
Share capital	%	10%	9%	10%	14%	14%	23%	25%	24%	23%
Share premium	%	67%	64%	67%	68%	69%	76%	81%	77%	74%
Share based payments	%	0%	3%	3%	1%	1%	2%	2%	2%	2%
Accumulated deficit	%	-37%	-25%	-19%	-18%	-27%	-58%	-60%	-50%	-39%
Currency differences	%	-1%	-6%	-16%	-14%	-12%	-14%	-14%	-14%	-12%
Non-current liabilities	**%**	**46%**	**28%**	**24%**	**1%**	**0%**	**1%**	**1%**	**1%**	**1%**
Long term debt	%	45%	28%	23%	0%	0%	0%	0%	0%	0%
Finance lease obligation	%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Deferred tax liabilities	%	1%	0%	0%	0%	0%	1%	1%	1%	1%
Current liabilities	**%**	**14%**	**28%**	**31%**	**48%**	**54%**	**70%**	**65%**	**60%**	**52%**
Loans	%	0%	0%	3%	23%	20%	34%	35%	30%	19%
Bank overdraft	%	0%	0%	3%	4%	8%	7%	4%	0%	0%
Finance lease obligation	%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Trade and other payables	%	12%	17%	14%	14%	22%	22%	26%	30%	33%
Taxes and social securities	%	1%	5%	9%	2%	3%	5%	0%	0%	0%
Income tax payables	%	1%	0%	1%	0%	0%	0%	0%	0%	0%
Provisions	%	0%	6%	0%	4%	0%	2%	0%	0%	0%
Total liabilities	**%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

SOURCE: COMPANY DATA, SPHENE CAPITAL

Cash flow statement

		2006	2007	2008	2009	2010	2011	2012e	2013e	2014e
Profit/loss after tax	kEUR	2,201	1,830	2,118	-279	-2,371	-7,428	564	1,745	2,267
Depreciation, amortization and impairment	kEUR	216	1,041	1,282	1,698	1,363	2,453	917	598	619
Δ provisions	kEUR	-12	1,574	-1,564	1,154	-1,242	596	-596	0	0
Share based payment	kEUR	37	0	48	25	27	27	28	30	33
Income taxes	kEUR	18	-165	-51	-1,692	-211	3,637	112	46	246
Δ other current assets	kEUR	-1,059	-446	-818	1,471	1,452	-1,455	342	-799	-749
Δ current liabilities	kEUR	1,328	-2,042	-201	-1,819	2,325	61	-444	1,126	1,054
Adjustments	kEUR	-165	0	-311	-102	-513	-44	20	0	0
CFO	**kEUR**	**2,763**	**1,943**	**490**	**407**	**822**	**-2,158**	**930**	**2,728**	**3,443**
Additions of intangible assets	kEUR	-4,363	-428	61	-16	-843	-575	698	0	0
Investments in property, plant & equipment	kEUR	-1,088	-944	-1,861	-1,095	-555	-1,043	-476	-596	-29
Adjustments	kEUR	0	-5,858	-207	164	23	-1,094	0	0	0
CFI	**kEUR**	**-5,451**	**-7,230**	**-2,007**	**-947**	**-1,375**	**-2,712**	**222**	**-596**	**-29**
FCF	**kEUR**	**-2,688**	**-5,287**	**-1,517**	**-540**	**-553**	**-4,870**	**1,152**	**2,132**	**3,414**
Δ share capital	kEUR	-16	0	0	1,367	-12	2,675	0	0	0
Δ financial debt	kEUR	8,180	0	-880	-880	-880	3,085	-393	-732	-2,500
Dividends	kEUR	0	0	0	0	0	0	0	0	0
Adjustments	kEUR	0	0	251	0	12	0	0	0	0
CFF	**kEUR**	**8,164**	**0**	**-629**	**487**	**-880**	**5,760**	**-393**	**-732**	**-2,500**
Δ cash & cash equivalents	kEUR	5,420	-5,824	-2,544	-162	-1,332	394	759	1,400	914
Beginning cash & cash equivalents	kEUR	3,126	8,546	2,722	178	16	-1,316	-922	-163	1,237
Ending cash & cash equivalents*	**kEUR**	**8,546**	**2,722**	**178**	**16**	**-1,316**	**-922**	**-163**	**1,237**	**2,150**

SOURCE: COMPANY DATA, SPHENE CAPITAL

* covered by bank overdraft

Segments

		2006	2007	2008	2009	2010	2011	2012e	2013e	2014e
Testronic										
Sales	kEUR	n/a	13,976	15,002	12,353	13,446	13,954	16,047	18,984	21,262
YoY	%	n/a	n/a	7.3%	-17.7%	8.8%	3.8%	15.0%	18.3%	12.0%
EBIT	kEUR	n/a	2,806	1,928	-252	957	916	1,938	2,351	2,725
EBIT margin	%	n/a	20.1%	12.9%	-2.0%	7.1%	6.6%	12.1%	12.4%	12.8%
YoY	%	n/a	n/a	-31.3%	-113.1%	n/a	-4.3%	111.5%	21.3%	15.9%
Kuju										
Sales	kEUR	n/a	20,751	23,061	19,652	12,347	12,267	13,739	16,281	18,596
YoY	%	n/a	n/a	11.1%	-14.8%	-37.2%	-0.6%	12.0%	18.5%	14.2%
EBIT	kEUR	n/a	1,457	1,908	46	-1,169	-157	806	1,003	1,323
EBIT margin	%	n/a	7.0%	8.3%	0.2%	-9.5%	-1.3%	5.9%	6.2%	7.1%
YoY	%	n/a	n/a	31.0%	-97.6%	n/a	-86.6%	n/a	24.4%	31.9%
DDP										
Sales	kEUR	0	0	0	0	0	194	440	0	0
YoY	%	n/a	n/a	n/a	n/a	n/a	n/a	126.8%	-100.0%	n/a
EBIT	kEUR	0	0	0	0	-399	-2,976	-450	0	0
EBIT margin	%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
YoY	%	n/a	n/a	n/a	n/a	n/a	645.9%	-84.9%	-100.0%	n/a
Corporate										
Sales	kEUR	0	0	0	0	0	0	0	0	0
YoY	%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
EBIT	kEUR	0	-1,587	-920	-1,284	-1,093	-1,331	-1,304	-1,344	-1,404
EBIT margin	%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
YoY	%	n/a	n/a	-42.0%	39.6%	-14.9%	21.8%	-2.0%	3.0%	4.5%

SOURCE: COMPANY DATA, SPHENE CAPITAL

DCF model

		2012e	2013e	2014e	2015e	2016e	2017e	2018e	2019e	20120e	2021e	2022e	TV
Revenues	**kEUR**	**30,226**	**35,264**	**39,858**	**44,598**	**48,992**	**52,622**	**55,318**	**57,206**	**58,570**	**59,686**	**60,726**	**61,758**
YoY	%	14.4%	16.7%	13.0%	11.9%	9.9%	7.4%	5.1%	3.4%	2.4%	1.9%	1.7%	1.7%
EBIT	**kEUR**	**988**	**2,011**	**2,650**	**3,144**	**3,649**	**4,130**	**4,563**	**4,948**	**5,300**	**5,640**	**5,981**	**6,176**
EBIT margin	%	3.3%	5.7%	6.6%	7.0%	7.4%	7.8%	8.2%	8.6%	9.0%	9.4%	9.8%	10.0%
Tax rate	%	3.4%	2.2%	9.6%	19.8%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
EBIT(1-т)	**kEUR**	**955**	**1,966**	**2,396**	**2,522**	**2,555**	**2,891**	**3,194**	**3,463**	**3,710**	**3,948**	**4,186**	**4,323**
Reinvestment	kEUR	222	-596	-29	-1,580	-1,465	-1,210	-899	-629	-455	-372	-346	-758
FCFF	**kEUR**	**1,176**	**1,370**	**2,367**	**942**	**1,090**	**1,681**	**2,295**	**2,834**	**3,255**	**3,576**	**3,840**	**3,565**
Invested capital	kEUR	15,453	16,111	15,205	16,785	18,250	19,459	20,358	20,988	21,442	21,814	22,161	
ROCE	%	6.2%	12.2%	15.8%	15.0%	14.0%	14.9%	15.7%	16.5%	17.3%	18.1%	18.9%	
WACC	%	13.9%	13.9%	13.9%	13.9%	13.3%	12.7%	12.1%	11.5%	10.9%	10.3%	9.7%	
PC(FCFF)	**kEUR**	**1,033**	**1,057**	**1,604**	**560**	**573**	**784**	**955**	**1,058**	**1,096**	**1,091**	**1,069**	

Terminal cash flow	kEUR	3,565
Terminal cost of capital	**%**	9.7%
Terminal value	kEUR	44,568
PV (Terminal value)	**kEUR**	12,401
PV (CF over next 10 years)	kEUR	10,881
Sum PV	**kEUR**	**23,282**
Insolvency risk	%	2.5%
PV operating assets	kEUR	22,700
Debt	kEUR	-8,625
Bank overdraft	kEUR	-1,722
Cash	kEUR	800
Value of equity	**kEUR**	**13,153**
Number of shares	1,000	58,872
Value per share	**EUR**	**0.22**

		TV CAGR						
	EUR	**0.8%**	**1.1%**	**1.4%**	**1.7%**	**2.0%**	**2.3%**	**2.6%**
TV EBIT margin	**7.0%**	0.16	0.16	0.16	0.16	0.16	0.17	0.17
	8.0%	0.18	0.18	0.18	0.18	0.19	0.19	0.19
	9.0%	0.20	0.20	0.20	0.20	0.21	0.21	0.21
	10.0%	0.22	0.22	0.22	**0.22**	0.23	0.23	0.23
	11.0%	0.23	0.24	0.24	0.24	0.25	0.25	0.25
	12.0%	0.25	0.26	0.26	0.26	0.27	0.27	0.28
	13.0%	0.27	0.28	0.28	0.29	0.29	0.29	0.30

SOURCE: COMPANY DATA, SPHENE CAPITAL

One view I

		2006	2007	2008	2009	2010	2011	2012e	2013e	2014e
Key Data										
Sales	kEUR	11,464	34,727	38,063	32,005	25,793	26,415	30,226	35,264	39,858
Gross profit	kEUR	9,619	29,465	34,428	27,607	22,035	21,830	25,526	29,688	33,126
EBITDA	kEUR	2,877	3,717	4,198	208	-341	-1,095	1,905	2,609	3,269
EBIT	kEUR	2,661	2,676	2,916	-1,490	-1,704	-3,548	988	2,011	2,650
EBT	kEUR	2,219	1,665	2,067	-1,971	-2,582	-3,791	584	1,785	2,507
Net profit	kEUR	2,201	1,830	2,118	-279	-2,371	-7,428	564	1,745	2,267
Nr. of employees		173	418	544	434	366	350	330	340	350
Per share data										
Price high	EUR	1.56	1.50	1.26	0.39	0.32	0.34	0.13		
Price low	EUR	0.97	0.84	0.23	0.15	0.13	0.10	0.06		
Price last	EUR	1.27	1.17	0.75	0.27	0.23	0.22	0.10		
Price average/last	EUR	1.20	1.26	0.32	0.24	0.26	0.22	0.09	0.09	0.09
EPS	EUR	0.10	0.07	0.08	-0.01	-0.06	-0.17	0.01	0.03	0.04
BVPS	EUR	0.41	0.48	0.46	0.39	0.33	0.17	0.14	0.17	0.21
CFPS	EUR	0.12	0.07	0.02	0.01	0.02	-0.05	0.02	0.05	0.06
Dividend	EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Price target	EUR									0.22
Performance to price target	%									144.4%
Profitability ratios										
Gross margin	%	83.9%	84.8%	90.5%	86.3%	85.4%	82.6%	84.4%	84.2%	83.1%
EBITDA margin	%	25.1%	10.7%	11.0%	0.6%	n/a	n/a	6.3%	7.4%	8.2%
EBIT margin	%	23.2%	7.7%	7.7%	-4.7%	n/a	n/a	3.3%	5.7%	6.6%
Pretax margin	%	19.4%	4.8%	5.4%	-6.2%	n/a	n/a	1.9%	5.1%	6.3%
Net margin	%	19.2%	5.3%	5.6%	-0.9%	n/a	n/a	1.9%	4.9%	5.7%
FCF margin	%	n/a	n/a	n/a	n/a	n/a	n/a	3.8%	6.0%	8.6%
ROE	%	23.6%	14.2%	17.0%	-2.0%	-19.1%	-99.9%	7.0%	17.7%	18.3%
NWC/Sales	%	9.1%	-1.2%	4.9%	-1.2%	-8.9%	-4.6%	-7.2%	-7.3%	-7.4%
Revenues per head	kEUR	66.3	83.1	70.0	73.7	70.5	75.5	91.6	103.7	113.9
EBIT per head	kEUR	15.4	6.4	5.4	-3.4	-4.7	-10.1	3.0	5.9	7.6
Capex/Sales	%	-9.5%	-2.7%	-4.9%	-3.4%	-2.2%	-3.9%	-1.6%	-1.7%	-0.1%
Growth ratios										
Sales	%	n/a	202.9%	9.6%	-15.9%	-19.4%	2.4%	14.4%	16.7%	13.0%
Gross profit	%	n/a	206.3%	16.8%	-19.8%	-20.2%	-0.9%	16.9%	16.3%	11.6%
EBITDA	%	n/a	29.2%	12.9%	-95.0%	n/a	221.1%	n/a	36.9%	25.3%
EBIT	%	n/a	0.6%	9.0%	n/a	14.4%	108.2%	n/a	103.4%	31.8%
EBT	%	n/a	-25.0%	24.1%	n/a	31.0%	46.8%	n/a	205.4%	40.5%
Net profit	%	n/a	-16.9%	15.7%	n/a	749.8%	213.3%	n/a	209.1%	29.9%
EPS	%	n/a	-29.0%	15.7%	n/a	715.0%	-4.4%	n/a	209.1%	29.9%
CFPS	%	n/a	-40.0%	-74.8%	-38.5%	93.7%	n/a	n/a	193.2%	26.2%

SOURCE: COMPANY DATA, SPHENE CAPITAL

One view II

		2006	2007	2008	2009	2010	2011	2012e	2013e	2014e
Balance sheet ratios										
Fixed assets	kEUR	10,081	18,586	17,694	19,148	20,351	17,312	16,173	16,171	15,581
Current assets	kEUR	13,424	10,567	9,841	8,567	6,874	8,073	7,681	8,880	10,542
Equity	kEUR	9,310	12,856	12,484	14,113	12,406	7,439	8,058	9,848	12,355
Liabilities	kEUR	14,195	16,297	15,051	13,602	14,819	17,946	15,796	15,202	13,768
Equity ratio	%	39.6%	44.1%	45.3%	50.9%	45.6%	29.3%	33.8%	39.3%	47.3%
Gearing	%	116.4%	64.0%	53.1%	1.3%	0.8%	2.6%	2.4%	2.0%	1.6%
Working Capital	kEUR	880	-365	1,870	-393	-2,285	-1,208	-2,171	-2,579	-2,967
Capital Employed	kEUR	1,908	1,860	4,613	1,982	219	1,583	-519	-929	-1,907
Enterprise Value										
Nr. of shares	mn	23.0	26.9	26.9	36.3	37.9	43.0	58.9	58.9	58.9
Market cap. High	kEUR	35,816	40,335	33,881	14,168	12,121	14,636	7,653		
Market cap. Low	kEUR	22,270	22,588	6,185	5,449	4,924	4,305	3,532		
Market cap. Average	kEUR	29,043	31,461	20,033	9,809	8,523	9,470	5,593		
Market cap. Last	kEUR	27,551	33,881	8,605	8,719	9,849	9,470	5,298	5,298	5,298
Net debt	kEUR	2,052	5,466	7,122	6,404	6,856	9,547	8,395	6,263	2,850
Pension reserves	kEUR	0	0	0	0	0	0	0	0	0
Minorities	kEUR	0	0	0	0	0	0	0	0	0
Excess Cash	kEUR	866	0	0	0	0	0	0	0	0
Enterprise Value high	kEUR	38,734	45,801	41,003	20,572	18,977	24,183	16,048		
Enterprise Value low	kEUR	25,188	28,054	13,307	11,853	11,780	13,852	11,927		
Enterprise Value average	kEUR	31,961	36,927	27,155	16,213	15,379	19,017	13,988		
Enterprise Value last	kEUR	30,469	39,347	15,727	15,123	16,705	19,017	13,693	11,561	8,148
Valuation ratios										
EV/sales high	x	3.38	1.32	1.08	0.64	0.74	0.92	0.53	n/a	n/a
EV/sales low	x	2.20	0.81	0.35	0.37	0.46	0.52	0.39	n/a	n/a
EV/sales average	x	2.79	1.06	0.71	0.51	0.60	0.72	0.46	n/a	n/a
EV/sales last	x	2.66	1.13	0.41	0.47	0.65	0.72	0.45	0.33	0.20
EV/EBITDA	x	10.6	10.6	3.7	72.7	n/a	n/a	7.2	4.4	2.5
EV/EBIT high	x	14.6	17.1	14.1	n/a	n/a	n/a	16.2	n/a	n/a
EV/EBIT low	x	9.5	10.5	4.6	n/a	n/a	n/a	12.1	n/a	n/a
EV/EBIT average	x	12.0	13.8	9.3	n/a	n/a	n/a	14.2	n/a	n/a
EV/EBIT last	x	11.5	14.7	5.4	n/a	n/a	n/a	13.9	5.7	3.1
P/E high	x	16.3	22.0	16.0	n/a	n/a	n/a	13.6	n/a	n/a
P/E low	x	10.1	12.3	2.9	n/a	n/a	n/a	6.3	n/a	n/a
P/E average	x	13.2	17.2	9.5	n/a	n/a	n/a	9.9	n/a	n/a
P/E last	x	12.5	18.5	4.1	n/a	n/a	n/a	9.4	3.0	2.3
P/BV	x	3.0	2.6	0.7	0.6	0.8	1.3	0.7	0.5	0.4
P/CF	x	10.0	17.4	17.6	21.4	12.0	n/a	5.7	1.9	1.5
FCF yield	%	-9.8%	-15.6%	-17.6%	-6.2%	-5.6%	-51.4%	21.7%	40.2%	64.4%
Dividend-yield	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash flow										
Cash flow from operations	kEUR	2,763	1,943	490	407	822	-2,158	930	2,728	3,443
Cash flow from investments	kEUR	-5,451	-7,230	-2,007	-947	-1,375	-2,712	222	-596	-29
Free Cash flow	kEUR	-2,688	-5,287	-1,517	-540	-553	-4,870	1,152	2,132	3,414
Cash flow from financing	kEUR	8,164	0	-629	487	-880	5,760	-393	-732	-2,500

SOURCE: COMPANY DATA, SPHENE CAPITAL

This page has been left blank intentionally.

This publication is issued by

Sphene capital

Großhesseloher Strasse 15c - 81479 Munich - Germany - Phone +49 (89) 7444 3558 Fax +49 (89) 7444 3445

Disclaimer

This publication is issued by Sphene Capital GmbH and is for distribution in the Federal Republic of Germany only to persons who purchase or sell transferable securities for their own account or for the account of others in the context of their trade, profession or occupation. This publication is for the use of the addressees only. It may not be copied to or distributed to any other person in whole or in part without the written consent of Sphene Capital GmbH. This publication is provided for general information purposes only and is furnished to you on a confidential basis. Any investment possibilities discussed in this publication may not be suitable for certain investors depending on their specific investment target or time horizon or in the context of their overall financial situation. It cannot be a substitute for obtaining independent advice. Please contact your bank's investment advisor.

The distribution of this publication in certain jurisdictions may be restricted by law and persons into whose possession this publication comes should inform themselves about, and observe such restrictions. In the United Kingdom this publication or a copy of it is being distributed only to, and is directed at (a) persons who have professional experience in matters relating to investments falling within article 19(1) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2001 (the "Order") or (b) high network entities falling within article 49(2) (A) to (D) of the Order, and other persons to whom it may be lawfully be communicated, falling within article 49(1) of the Order (all such persons together referred to as "Relevant Persons"). Any person who is not a Relevant Person should not act or rely on this publication or any of its contents.

This publication does not constitute a solicitation to buy or an offer to sell any securities and shall not be construed as constituting an offer to enter into a consulting agreement. Neither this publication nor any part of it establishes a basis for any agreement or other obligations of any kind. Sphene Capital GmbH and its subsidiaries/affiliates do not accept any responsibility for liabilities arising from the publication and/or use of this publication or its contents. Neither Sphene Capital GmbH nor its subsidiaries/affiliates guarantee the accuracy or completeness of information used for this publication and nothing in this publication shall be construed to be a representation of such a guarantee. Used information has not independently been verified. Any opinions expressed reflect the current judgment of the analyst who prepared this publication in conjunction with his/her occupational activity and may be changed pursuant to future events and developments. Views expressed do not necessarily reflect the opinion of Sphene Capital GmbH or any of its subsidiaries/affiliates. **Sphene Capital GmbH reserves the right to change the views expressed in this publication at any time and without advance notice.** Sphene Capital GmbH may have issued other publications that are inconsistent with and reach different conclusions from the information presented in this publication. Those publications may reflect the different assumptions, views and analytical methods of the analysts who prepared them. Past performance should not be taken as an indication or guarantee for further performance, and no representation or warranty, expressed or implied, is made regarding future performance.

This publication is being distributed by electronic and ordinary mail to professional investors, who are expected to make their own investment decisions without undue reliance on this publication.

All share prices mentioned in this publication are closing prices of the XETRA Electronic Trading System, or where unavailable local stock exchange, as of the trading day preceding the day of the publication.

Investment Recommendations (12 months investment period)
Buy: We expect a stock to rise by at least 10%.
Hold: We expect a stock to move within 10% of the benchmark.
Sell: We expect a stock to fall by at least 10% and underperform the benchmark.

Statements according to Section 34b of the German Securities Trading Act and Ordinance on the Analysis of Financial Instruments

Section 34b of the German Securities Trading Act in combination with the Ordinance on the Analysis of Financial Instruments requires a company preparing a securities analysis to point out potential conflicts of interest with respect to the issuer that is the subject of the analysis. A conflict of interest is presumed to exist, in particular, if a company is preparing a securities analysis.

- holds a more than 5% interest in the capital stock of the issuer that is the subject of the analysis,
- has been a member of a syndicate that has underwritten the issuer's securities in the previous 12 months,
- is serving as a liquidity provider for the issuer's securities on the basis of an existing designated sponsorship contract,
- has been providing investment banking services for the issuer analyzed during the last 12 months for which a compensation has been or will be paid,
- is party to an agreement with the issuer that is the subject of the analysis relating to the production of the recommendation,
- or any of its affiliates are regularly trading securities issued by the issuer analyzed or securities based on these issues,
- or the analyst covering the issue has other significant financial interests with respect to the issuer that is the subject of this analysis, for example holding a seat on the company's boards.

Sphene Capital GmbH uses the following keys:

Key 1: The analyzed company actively provided information material for preparation of this publication.
Key 2: This publication has been customized to the issuer and has been modified afterwards before publication. Thereby the analyzed company has not been provided with a publication or draft of publication which provided for an investment recommendation.
Key 3: The analyzed company owns more than 5% of the capital stock of Sphene Capital GmbH and/or a company affiliated with Sphene Capital GmbH.
Key 4: Sphene Capital GmbH and/or a company affiliated with it and/or the analyst having prepared this publication owns more than 5% of the capital stock of the analyzed company.
Key 5: Sphene Capital GmbH and/or a company affiliated with it and/or the author of this publication acquired shares of the analyzed company free of charge or for a consideration below the stated target price and before the shares' public offering.
Key 6: Sphene Capital GmbH and/or a company affiliated with it serve as a liquidity provider for the issuer's shares on the basis of an existing market maker or liquidity provider contract.
Key 7: Sphene Capital GmbH and/or a company affiliated with it was subject to an agreement on services in connection with investment banking transactions with the analyzed company in the last 12 months or within the same period received consideration on basis of such an agreement.
Key 8: Sphene Capital GmbH and/or a company affiliated with it have concluded an agreement on the preparation of this publication with the analyzed company.
Key 9: Sphene Capital GmbH and/or a company affiliated with it receive commission earnings arising from commercial activities from the analyzed company.
Key 10: A member of the managing board of Sphene Capital GmbH and/or the author of this publication is member of the supervisory board of the analyzed company.

Investment Recommendations (12 months period):

Date:	Price target:	Rating:	Conflict of Interest (key)
09.07.2012	EUR 0.22	Buy	1, 2, 8

An overview on the allocation of Sphene Capital's investment recommendations is available under http://www.sphene-capital.de.

Statements according to Section 34b of the German Securities Trading Act and Ordinance on the Analysis of Financial Instruments
Sources of information:
This publication is based on information obtained from carefully selected public sources, especially suppliers of financial data, the publications of the analyzed company and other publicly available media.

Rating principles/Methodology/Risks
For the preparation of the publication, company-specific methods from the fundamental stock analysis were used, such as quantitative statistical methods and models, and practices used in technical analysis (inter alia, historical valuation models, net asset value models or sum-of-the-parts valuation models, discounted cash flow models, economic profit models, multiplier models or peer-group comparisons). Valuation models are dependent on macroeconomic factors such as currencies, interest rates, commodities and on assumptions about the economy. In addition to that, market sentiment and political developments may impact the valuation of companies.

Selected approaches are also based on expectations, which may change depending on the industry-specific developments without warning. Consequently, recommendations and price targets based on these models may change accordingly. Investment recommendations cover a period of twelve months and may be subject to market conditions. The expected price developments can be achieved faster or slower, or be revised upwards or downwards.

Analyst certification:
The author(s) of this publication certify that their views about the companies and their securities discussed in this report are accurately expressed and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this publication.